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1843

THE
BOOK OF HEALTH,

OR

THOMSONIAN THEORY AND PRACTICE OF MEDICINE,
INCLUDING THE LATEST VIEWS OF
**PHYSIOLOGY, PATHOLOGY, AND
THERAPEUTICS;**

BY

F. K. ROBERTSON, T. P.,

Licentiate of the N. Y. S. Thomsonian Medical Society,
and Lecturer on Medical Science.

ALSO,

DESCRIPTIONS OF DISEASE, MEDICAL PRACTICE

AND

Materia Medica,

BY

SILAS WILCOX, T. P.,

Licentiate of the Vt. S. Thomsonian Medical Society.

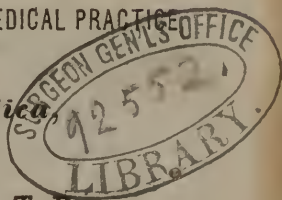
DESIGNED FOR EVERY BODY.

BENNINGTON

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Entered according to Act of Congress, in
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By S. WILCOX AND F. K. ROBERTSON,
In the Clerk's Office of the District Court
of the State of Vermont

“All men ought to be acquainted with the medical art.”
—HYPOCRATESE.

“I would ask wherein lies the difference between the medical practitioner and the nurse at the sick bed?”—MAJENDIE.

“It is time to take the cure of pestilential fevers out of the hands of physicians, and place it in the hands of the people.”—RUSH.

“I will endeavor to instruct them all within my power.”
* * * “Aid Nature.”—THOMSON.



TO DR. SAMUEL THOMSON,

The American Medical Revolutionist ; in consideration of his demonstration that poisons and blood letting are totally unnecessary in the cure of disease ; in consideration of his simple, safe and most effectual system of medicine ; and the vigor and talent with which he has brought it before the world in opposition to the Regular Faculty ; in consideration of the amount of misery it has relieved, the pleasure it has given, and the length of life it has already added to existence, this work is most respectfully dedicated by

THE AUTHORS.

TO THE FARMER, THE MECHANIC, AND THE NON-PROFESSIONAL READER IN GENERAL. This work is designed for you. It has been taught, and believed that common people—nature's real nobility—have not a proper right to study medicine. That is utterly false. Would you be slaves? No! Arouse, then, to your sense of reason and humanity, and take the charge of your own bodies. Your abilities are equal. yea, better, for the task, than the faculty. Dr. Rush says to suppose the talents of those who can learn to *preserve health*, by the cultivation of grain, and the baking of bread, are not equal to the task of *restoring health*, is to question the goodness of the DEITY. Yourself do know that rejecting the physician has sometimes saved life and limb. We know it has hundreds.

Be your own physicians! No one can supply your place. It will not only save your LIVES, but your MONEY. With the practical part of this work you will be pleased.— If the theoretical part seems more difficult we hope you will not pass it over, nor condemn it as too "high flown."

We have endeavored to make the language explain itself. Besides, you will remember that all the words we use may be found in Webster's Dictionary.

When we enter upon a *new subject*, we *must* employ *new terms*. Copiousness of language is strictly necessary to definite expressions. We once joined the crusade against "tecnicalities;" but now, with the cultivation of ideas, we find it necessary to cultivate language.

PREFACE.

MOST authors, in bringing their new works before the world, are in the habit of offering some apology, in which they are prone to disavow all pecuniary motives ; while their readers are equally as prone to assign money as their first object.

Should the author of these pages meet with a like accusation, he will most impenitently plead guilty.

If the reader thinks this a *bad* apology, he must think it a bad thing to have been, a number of years engaged, under great embarrassments, in the study of medicine. To have practiced in a number of places with no pecuniary profit ; and to have withheld himself from fully entering into "a circle of practice," with the design of pursuing, more independently, the study of the *science*. A bad thing to have discovered, and deeply felt, the necessity of the more general diffusion of *medical knowledge as it now is*. To have devoted himself to this cause in hazard of fortune—may be in hazard of reputation. To have prosecuted this object by commencing a career of public lecturing. To have felt the necessity of leaving his ideas with the people in some more permanent form than the fleeting remembrance of impressions on the liquid air ; and to have wished for some pecuniary reward, to enable him to honorably carry on his project.

However, it is hoped when the reader has perused the volume, and compared its great *value* to *vitality*, with its small *price* to the *purse*, he will consider the first object only

the *basis*, improvement of knowledge, the *superstructure*, and if he please, benevolence the *dome*.

It may be inferred, from the above remarks, that the author is not "old and experienced." He frankly acknowledges, that comparatively it is a fact; but he trusts that this defect is more than compensated by being associated in the practical part of this work, with Dr. Silas Wilcox, for ten years an extensive practitioner in Vermont, and six in the town of Bennington and its vicinity.

Previous to our arriving in this place, we had heard, from different persons, some very animated accounts of the success of the practice here, and its adoption by the majority, and the most influential of the people, which we thought to be too good to be true; but we find upon examination that Thomson's eternal rules have prevailed to an extent unparalleled within our knowledge.

This town embraces three large villages, and contains about 4,000 inhabitants.

When Dr. Wilcox commenced, there were in his immediate village, East Bennington, *five* regular physicians in practice. They are now all gone, excepting *one*. At first, besides the regulars, the people kept two Thomsonian physicians constantly employed; now, one will suffice in ordinary times. This singular state of things has two grand causes. Firstly, the abandonment of the regulars, and their poisons in the name of medicines. Secondly, the spread of Thomsonian knowledge among the people. For the pains taken in supplying the community with books, papers, and verbal information, Dr. W. is deserving of much honor.

No less than a dozen families, in the village of East Bennington, have books giving a full and complete account of the Thomsonian Theory and Practice. They do much of their own practice. The most intelligent and wealthy have embraced it. When a friend is taken sick he is waited upon, by his neighbors with the kindest solicitude.—Not in *passive sympathy*, but with *actual benevolence*.

If the patient is not decided with respect to the medicine, they do not sneak away and leave a regular to take the *responsibility*; but kindly and firmly press him to receive the blessings of a *natural practice*.

Very much the same state of things exist in the adjoining town, Shaftsbury.

The whole presents, comparatively, a happy picture of the diffusion of true medical knowledge. But much yet remains to be done.

It is to further this work that the present volume is offered ; and the authors fondly hope that the people will receive it as a botanist would an exotic from the gardens of Paradise ; unless it should fail to correspond with its noble object ; than from a land of the purest liberty and most general intelligence ; than from Bennington, of heroic memory, where the wilderness of medical error is almost cleared away, the writer knows no place where a work like this could more fittingly emanate. No soil more congenial to nourish a plant with branches blooming with physiological hope, and dropping with the balm of health.

This work, although intended as a complete guide to the practice, is not designed, completely, to take the place of any other on the same subject ; but in a measure to fill a place occupied by none.

Now that the Thomsonian Practice is fast going into the hands of the most learned class they will naturally demand, if it is founded in nature, that it be illustrated by the sciences. To do this is an important object of the following pages.

We intend to show many reasons, drawn from physiology and the other sciences, tending to explain the nature of disease, strongly indicating the use of Thomsonian remedies, and explaining their mode of operation.

We do not, however, expect to solve *all* the questions arising out of medical subjects ; but we *know* we can *many* ; solutions too, of great importance ; for errors in theory lead to errors in practice.

Thomson says, " Clearly to understand the laws of life and motion, the radical principles of animalization, is of infinite moment."

Notwithstanding Abercrombie, and others, have written so much about the uncertainty of medical science, yet we hope to be pardoned for saying, positively, *we know*. The shade of Bacon should not deter us ; for the life of a patient is no subject for guess work. We have long since

ceased to say we *believe* in the Thomsonian system. It is not a matter of *belief* but of *knowledge*. We would as soon talk of believing the multiplication table, or that twice two are four. On the contrary, the old school have advanced very little into the province of demonstration. With them the word belief is an appropriate term; and it often requires as much credulity as to believe that two from four leaves six.

The more we study the sciences, the more philosophic meaning we discover in the simple sayings and doings of the illustrious Thomson. It is true, that many of his terms are not in accordance with their general usage in science, yet we can easily perceive, in comparing them with each other, and with their application in practice, that he had a clear and accurate conception of the most important laws of life, disease and medicine. We shall endeavor to bring out these ideas in the most perspicuous language, and by the most demonstrable illustrations of science; and although this work is designed for the family shelf, yet we trust it shall not be the less appropriate in the professor's library.

Although this work is intended to contain all the reasons, and medicines which the present state of knowledge furnishes, and makes necessary in ordinary cases, yet it is not designed to intercept sales of other popular works in the Thomsonian market; but to increase them.

It is hoped that this little volume will pioneer the way into many families whose ability and intelligence will not leave them contented until they have filled up their medical libraries with such works as the following:—

THE THOMSONIAN MATERIA—medica, and BOTANIC FAMILY PHYSICIAN—an elegant volume of 800 pages—Samuel Thomson's last edition of his celebrated book—Edited by John Thomson. This work contains a very complete system of anatomy, an outline of botany, and a description of medical plants illustrated by most splendid colored drawings. The possession of this work, from a legal agent, constitutes the Family Right—Price \$12,00.

THE AMERICAN VEGETABLE PRACTICE, by Morris Mattson—with beautiful plates, and containing much information not found in our other works—Price \$7,00.

A Treatise on the Botanic Theory and Practice of Medi-

cine, by A. N. Worthy, M. D., professor of the theory and practice of medicine in the Southern Botanic Medical College. This work contains an excellent diagnosis, and a minute description of most varieties of disease incident to man. It will probably be our standard on this subject for many years—Price \$5,00.

And a new work just expected from the press on the Thomsonian Practice, by J. W. Comfort, M. D.,—Price \$3,00.

F. K. R.

Bennington, May 1st, 1843.

PART FIRST.

CHAP. I.

IMPORTANCE OF THE DIFFUSION OF MEDICAL KNOWLEDGE.

LIFE is sweet. Existence! It is a boon that well becomes the gifts of God. While now I lift my pen to write of life and health, my heart and very blood exults in being, and dances joyously in the wild and mellow beams of an April's morning sun. The music of the newly arriven birds—the robin's cheerful notes, and the blue bird's warbling melody, are to me the vehicles on which my gratitude is ascending to the GIVER of life, and all its senses perceive. Each passing neighbor's cheerful countenance, and the children gamboling on the frost forsaken walk, all speak the love of life.

It is a precious souvenir from Heaven. A goblet on which is richly chased figures easily worn—of workmanship that no art can imitate, yet frail and easily rent. A prototype of the caledonians galvanic cup and ale, in which we can taste itself and all other happiness.

It is the part of wisdom, and the authors' earnest desire that all should keep this gift with grateful care; or else corroding canker, for the time, may embitter the draught; or else some careless jar may make a fissure, and then no more shall happiness fill to the brim the cup of life; ah, yes, or else some reckless transgression may dash it into a thousand fragments of utter worthlessness.

See how all the world are striving, with pleasure, to run the goblet over; ignorant of its structure; thoughtless of the conditions of the gift; regardless of the laws of health.

See yonder farmer—mechanic—merchant; each with all the eagerness of his soul is striving for the various fruits which fill the cup with the mingled wine of life, while oft, with strangest want of heed, the goblet itself is cracked, or crushed forever in the strife.

Behold the pastor, given to tutor the highest feelings of happiness; behold the magistrate, given to protect the fruits with which they are fed; yes, behold the physician, given to preserve the very cup in which they are mingled, and see how each have violated the interest every man should have in the necture of his own goblet of life. The sciences of religion and government have long since been wrested from the hands of potentates and princes and given to the people; while the science of life, that which is the very basis of the others, has been withheld from them.

The strangeness, and the resulting misery of this error, should cause phylosophers to wonder and poets to weep.

So little has been learned, by society in general, respecting the phylosophy of life, so little do they think that health depends strictly upon conditions, so much they seem to have trusted upon the predeterminations of fate, or the blind accidents of chance, that there seems to have been even more than an apathy upon the subject of health. It would seem that in the pursuit of pleasure the people have been endeavoring to see how far they can venture down the whirlpool of disease without being irretrievably caught by its eddying force, drawn down into the vortex and dashed at last upon the rocks of death.

America! hearken, think, speak and proclaim that these things shall be so no longer. It is a cause of VITAL importance. It is no less than a question between life and death. No question between wealth or poverty, fame or obscurity can compare with it. Attend to the laws of life! So great is the call, and so much is to be done, that the farmer should leave his plough in the field, the mechanic drop his tools and the merchant forsake his counter, and fly to the records or councils of the learned and experienced, that

they may return to their avocations with secure or improving health ; and then, with a sound body, take moral means to enjoy a good old age and a happy future.

Every man should be his own physician.

It must be conceded by all, that in a complete and general view, the knowledge of preventing diseases is the most important part of the science of medicine ; as much more important, as it is easier to prevent disease than to cure it.— And shall this be confined alone to the physicians ? Can every man have a physician at his elbow to point out to him in what condition of body he may be safely exposed to inclement weather, and how long it may be continued, when the air he breathes is pure or deleterious, when he is in contact with poisonous substances, where that median line of wisdom is, where the indulgence of the appetites, and health, and all the pleasures of society together meet, how he may understand the nature of disease in its incipient stages and thwart it in the beginning ? Certainly not.— He must have the knowledge of these things himself.— And if every man should know the most important part of the science of medicine why not know the least important part—the means of curing disease. If those means are founded upon the laws of life, it follows of course if he knows one he must know the general principles of the others ; and to this we have the testimony of Thomson “That which will prevent disease will also cure it.”

What ! every man be a physician. We do not say so. Saying that every farmer should be an agriculturist, is not saying that every farmer should be his own laborer, and do all his own work ; and saying that every man should be his own physician, is not saying that every man should be his own practitioner and nurse ; but every man ought to know how his own work should be done, especially that which so nearly concerns him as the preservation of health, and the removal of disease. As well have every man be his own miller, tailor, and shoemaker, says one. Not a very correct comparison ; however there is no philosophic principle in either of these trades that should not be known by every body ; although it is not necessary that they should know every particular application of these princi-

ples, any more than a man in studying mathematics should know the particular mode in which every problem has been wrought since the days of Euclid.

The laws of equality have ordained that it is not incompatible with the interests of society, for all, who are capable, to study and understand the sciences. The world for the last hundred years has been fast approximating this privilege.

Natural Philosophy, Chemistry, Geography, Mathematics, &c., have been generally diffused. But strange to say that medical science, that which should have been the first of them all, has been the last. Let the time soon come when the last shall be first. Let medical knowledge be diffused. Let it even be taught in common schools. It is not improper for the school-room; nor will it burthen the scholar's mind with too many studies. Fifty years ago, objections might have been raised against Geography as a branch of common learning, especially before figures; but now we find it introduced and taking that place with the greatest success.

From the author's own experience in teaching, he can say that its difficulties do not arise so much from introducing too many studies within the period of youth, as confining them to the accomplishment of one before they leave it. The latter course must overtask the mind, if any thing. No philosopher with all his wisdom and age ever perfectly understood any science.

Newton after he had discovered the laws that govern the Solar System, and analyzed the light of the sun, says he felt himself but a little child gathering pebbles on the shore of the great ocean of science." Before fifteen years of age every youth should be instructed in the rudiments of all the important sciences; advancing in each with the increase of their powers.

Do not startle and protest, reader; here is respectable testimony.

Dr. Combe, author of the "Constitution of Man," in a letter to Dr. Lee, of New York, concerning a work on physiology, which he was about to publish for elementary schools, writes thus:—"I take the liberty to urge very earnestly upon your attention, not only the advantage, but

the *necessity* of introducing instruction in anatomy and physiology into popular education.

The great laws of health cannot be understood, nor their importance appreciated without this knowledge. I do not mean that you should teach your children all the minute details of these sciences, which would be necessary, if you intended them for the *practice* of medicine or surgery ; all that I desire is, that the structure of the leading organs of the body should be explained so far as to render the *functions* of them intelligible ; and that on this knowledge be founded a clear and practical elucidation of the *laws of health*. I can certify from observation, that this instruction may be communicated to *children of ten years* and upwards, with great success. The structure addresses their observing faculties, and an explanation of their functions is as interesting to them as a romantic story."

On this subject, Dr. Rush, the most distinguished American medical writer of the old school, holds the following language:—"The essential principles of life are very few, they are moreover very simple. All the morbid effects of heat and cold, of eating and drinking, and of the exercises of the body and mind, may be taught with as much ease as the multiplication table. Let us strip our profession of every thing that looks like mystery and imposition, and clothe medical knowledge in a dress so simple and intelligible that it may become a part of academical education in all our seminaries of learning."

Such is the language of the most of those original medical writers, who have in the words of Rush "Emancipated themselves from the tyranny of the schools of physic."

It is true that within the past hundred years, some reasonable and benevolent physicians have attempted to diffuse medical knowledge among the people ; but little has been effected. Why ? when we say poison and lancet, the reader needs no other hint.

Recently much good has been done in this department, under the ostensible names of physiology and dietetic regimen, with Gall, Spurzheim, the Combes', Graham, Alcott and others at their head.

But there is a work, more particularly medical, which strikes our attention, emanating from the old school by

Wm. Buchan, of Scotland, "Designed for private students." This work went through twenty-two editions in England, and was translated into all the principal languages of Europe. The author says in his introduction, "Men of every occupation and condition in life might avail themselves of a degree of Medical knowledge."

What think you reader! when regular physicians come forward, advocating the diffusion of medical knowledge with such medicines as Mercury, Antimony, Lead, Copper, Opium and the Lancet? What may not the Thomsonians say about the diffusion of their system, which emanated from a man taught only in the school of Nature, and depends upon a *Materia Medica* of the most harmless, yet efficient vegetables?

We trust that this question is about to be answered in demonstrations already proved; but out of it may arise another.

Will the diffusion of medical knowledge destroy the medical profession as a class? It is not probable. But like fire upon gold, it must greatly improve their qualifications. They can no longer impose their "hollow-hearted quackery" upon the people. They are enlightened. They must be able and accomplished in their profession, or forsake it. Again the greater amount of mind brought to bear upon medical science, will greatly enlarge the field of discovery, and thus tend to give us a medical profession of the most exalted class. On the other hand if the physicians should be banished, and the diffusion of medical knowledge be the cause of it, be it so, so be it.

Are these happy prospects at hand, or can we only contemplate them in the distant horizon of the future.—In the midst of civil and religious liberty, the people have suffered in medical slavery. It should be an article in the declared rights of every intelligent freeman, that he will swallow no medicine without knowing its composition. But how very different is the present state of society. We have often been pained to see with what obsequious obedience many people think they must take medicine from our hands, blind to causes and dumb to questions.

For a person to think he can never prescribe for himself or family, but must send for a physician upon every trifling occasion, and swallow down his pills and drops of simple bread, or deadly arsenic, as the case may be and has been, without knowing any thing of their nature, is to be a crouching slave to a most contemptible medical tyranny.

It should have been considered that if the science ever approximated to perfection, it would prescribe definite rules for the practice; which rules might be learned by the people without their going into all its intricacies.

We are privileged with this approximation, in the works of Thomson, and the Thomsonians.

It was the favorite object of the great originator of this system to give his knowledge to the people. He says "After thirty years' study and *repeated successful trials* of the medicinal vegetables of our own country, in all the diseases incident to our climate; I can with well grounded assurance recommend my system of practice to the *public*."— Again, "As fast as my children arrived at the years of discretion, I instructed them how to relieve themselves, and they have enjoyed good health ever since. If parents would adopt the same plan, and depend more upon themselves and less upon the doctors, they would avoid much sickness in their families, as well as save the expenses attending the employment of regular physicians whose charges are a greivous burthen upon the people." And to this end he says "I will endeavor to instruct them all in my power." In his own verse (for he is sometimes poetic) he expresses the same idea :

"We wish every family apart
To understand the healing art,
Without so many forms and rules
Coined and practiced by the schools."

The facts of all sciences come first and their philosophy follows after. The true art of healing is only a systemised plan of nursing; and the true philosophy of medicine, is only an illustration of facts learned in the first place by experience.

Buchan says, "Very few valuable discoveries have been

made by physicians: 'They have in general been either the effect of chance or necessity.'

In philosophy the *effect* can never be made to rule the *cause*; why then has science been made to proscribe experience? why have laws been enacted fining and outlawing all unlicensed practitioners? Was it really to prevent quackery? Buchan says, "The most effectual way to destroy quackery in any art or science, is to diffuse the knowledge of it among mankind." Legislate to make the people believe that none but the learned and licensed can attend upon the sick, and you legislate to make them ignorant. Every blockhead who can buy his way through college will get a diploma, and how can the people know the difference? To prevent quackery, you take the very means to create it. There is a swaggering, white Indian doctor in Troy, N. Y., who can always tell at sight what ails his patients. In describing the case of one, he said "his *lungs* were sound, but his *lights* were very much effected." Ha! ha! ha! Where are the lights, said a bystander? "Right here," said he clapping his hands upon his abdomen. Entering an office one day he chanced to discover a phrenological bust, which was a new thing to him; and examining the bumps, he says: "I have a number of patients with such bunches on their heads as these. This shows how they are diseased." In fact it appears that he could not read; and yet this quack is called into, so called, intelligent families; and he is said to make more money than any physician in the city. That this pretender should be able to oust the regulars, is no wonder. But was he ever known to impose upon a well informed Thomsonian family? No!

Now that the Thomsonians are fast triumphing over the regulars, forming societies, granting diplomas, and even chartered by some of the States, and as human nature is ever the same, so when the regulars are gone, it may be expected that the Thomsonians will step into their tracks, so far as craft is concerned, and endeavor to keep the practice in their own hands. But let the intelligence of the people forbid it. *No man has any moral right to withhold the truths of God's nature from his suffering fellow creatures.* If an author should have pay for his works;—if

Thomson should have pay for his justly granted patent, that is another thing ; but the knowledge must be spread

We are sorry to see, that in some measure, there is a contrary spirit ahead, even among the 'Thomsonians, At the time that the 'Thomsons' were getting out their large work I heard one of our physicians say that he hoped their price would be one hundred dollars, so that every Tom, Dick, and Harry about the country could not have them. However, as to the soundness of his opinion, we will merely say that he once gravely told some people while examining a young man in epilepsy that there was no action in the du-cidea (meaning decidua, if any thing, no part of the male.)

Let such 'Thomsonians beware. Dr. L. M. Whiting, a regular, says that "Those men who still prefer darkness, and persist in quackery, shall be scathed with the lightnings of public indignation."

Those physicians who endeavor to "conceal their art," are wickedly foolish ; and especially, if Thomsonians, they "stand in their own light."

Spreading their knowledge, will secure them confidence, increase their practice, and preserve them from competition from their own school. Where their patients are ignorant of their medicines, a little apparent danger may cause them to send for a regular. But when they are supplied with well read books and papers, the physician may depend upon their patronage. It is true that this will enable many families to administer to themselves in ordinary cases, yet what the physician loses in this way will be more than compensated in the number of his patients, at first ; and if at length it should very much diminish, every young physician should foresee, that eight or ten years' of constant practice will make him tired of it ; and then he will be happy to have the people take the burthen of the practice upon themselves.

But above all this, shall a physician have the moral hardihood to venture one single step in a course which may sacrifice the lives of his patients to the lining of his pocket ? "Thou shalt not covet." "Thou shalt not kill."

CHAP. II.

BRIEF VIEW OF THOMSON'S LIFE AND CAUSE

AFTER things, that of events, are most interesting to our minds. There is no thing on earth so great as man; and no events more interesting than the histories of great men.

The standard of true greatness, is the joint amount of good done, and difficulty overcome.

While governed by this rule, and looking over the histories of physicians, whether of ancient or modern times, we find none that claims our attention before SAMUEL THOMSON.

It seems that his father was one of those hardy and enterprising pioneers, who, infatuated with the love of improving the borders of the wilderness, have so much distinguished Americans.

He removed from Massachusetts, with his young family into the newest settlements of New Hampshire; and there, about one year afterwards, in the town of Alstead, on the 9th of February, 1769, Samuel Thomson was born. It would seem, according to the common view, he has had to contend against almost every possible disadvantage to a life of science.

His parents poor—in the wilderness three miles from the nearest settlement—called at four to the occupations of the farm—spent his youth in clearing the forest, and subduing the earth—attending school but one month. At nineteen

with his father plunging again into the wilderness on Onion River, Vermont—yet through all these privations to intellect, we discover the gleaming of a transcendent genius, which at length broke forth, and shone above all the lights of science in the western hemisphere.

That specific talent for medical botany, which beamed with unwaning splendor at three score and ten, peeped out with a precocious light at the early age of four. It was then, when one day in the fields in pursuit of the cows, that he discovered, and made an experiment upon the sensible qualities of the far famed *Lobelia*. An experiment which he often repeated upon his companions: until his natural impulse for operating upon living bodies led him to discover it was a most powerful means of removing disease. At the age of eight, he says “I had at that time a very good knowledge of the principal roots and herbs to be found in that part of the country, with their names and medical uses; and the neighbors were in the habit of getting me to go with them to show them such roots and herbs as the doctors ordered to be made use of in syrups, &c.; and by way of sport they used to call me doctor.” It was fortunate for Thomson’s enquiring mind, that in early life he was privileged with the society of one of those noble and benevolent women, so often despised: a doctress in roots and herbs, to whom the family was much attached, there being no other physician within ten miles. This was Mrs. Benton, who with a bosom flowing with the “milk of human kindness,” used to take little Thomson with her into the fields and woods, and teach him the names of plants and their medical uses. Let her name go down to posterity embalmed with honor—remembered as the one who sowed the seeds of medical observation in that most congenial soil, from which has sprung the noble system that extends its branches especially, and most invitingly to the female. Let every member of the sex imitate her example. *Females are natural physicians*. May all mothers educate their sons in the wisdom of preserving health, and their daughters in the angelic art of relieving the afflicted.

At the age of sixteen Thomson’s medical knowledge had attracted so much attention that his parents talked of sending him to live with a root doctor. Although he was

naturally industrious, yet the pent up fires of genius filled him with an indefinable ambition; and made him ill at ease in his occupation. "I took a great dislike" says he "to working on a farm, and never could be reconciled to it." When the prospect of becoming a physician, had given an object to his vague and smothered ambition, he was filled with delight—but only to be disappointed; for soon after his parents said he had not learning enough, besides they could not spare him. This, in his own language, made him "very unhappy," and depressed his mind with a feeling, which they only, who have experienced it can remember, but never tell.

By industry the family had acquired a small property, and at the age of twenty-two we find Thomson with a farm and family of his own.

Some one of his family were often sick, and to avoid going a distance for medical aid, he rented a house which he had to a physician. This gave him a good opportunity to ascertain his manner of practice, and the value of regular physicians; and he says "I found from sad experience that they made much more sickness than they cured." In fact he says "there was not a month in the year but what I had some one sick in my family; so the doctor paid his rent and keeping very easily."

Thomson had been all the while collecting his favorite knowledge, and his house was well supplied with vegetable medicines, although he had no design of becoming a physician. But it so happened that some of his family were five times given up as incurable; and he, by his simple means each time succeeded in restoring them. In one instance the physician had left his little daughter to die of the scarlet fever.

Thomson then took the case in his own hands, and as if acting by intuition, he took the child upon his lap, covered her and himself with a blanket, while he directed his wife to make a steam of vinegar beneath them, and he kept up the internal heat with warming drinks. In this way he soon relieved the little sufferer; and continuing in it about a week, cured her; although the canker had made such inroads as to destroy the sight of one eye.

Such was the commencement of steaming in the Thom-

sonian Practice. Likewise, it was in his own family that he tested the nature of Lobelia. Established the use of stimulants, as a triumphant means of curing fever; and of astringents in removing the canker, or apthe from the alimentary canal; and demonstrated the entire inutility of poisons.

These instances of success in his own family, soon began to be noticed by his neighbors, and those who could get no relief from the physicians appealed to him. This called his attention so much from his farm, that at last he resolved to give it up and adopt medicine as a profession.

The first two patients which he was called to attend, of which he has given us a history, presents a complete picture of his ensuing life. Successful in curing, yet titled with contempt, paid with ingratitude, and perplexed with the ignorance of his patients respecting the conditions on which health is to be obtained. But nothing was able to discourage him. It seems that obstructions in his way, only enabled him to ascend upon a higher road to glory,

At this stage of life, he says, "After I had determined to make a business of medical practice, I found it necessary to fix upon some system or plan, for my future government in the treatment of disease" This his capacious mind furnished him at once; and he struck out a system, which the experience of fifty years has only served to confirm.

Like the immortal Linneus, who invented a system of botany that should govern all future discoveries within that kingdom, he says, "I deemed it necessary, not only as my own guide, but that whatever discoveries I should make in my practice, they might be so adapted to my plan, *that my whole system might be easily taught to others and preserved for the benefit of the world.*"

In the language of his enterprising son Cyrus "We must have no theory that cannot be carried out." This theory applies to all diseases without exception.

When Thomson arose, Cullen's authority was at the head of medical science. How great the difference between these two physicians! Thomson's theory always corroborated and never contradicted his practice. Not so with Cullen's. He held that all fevers were preceded by debility; yet bled to cure them. Thomson held that they

were caused by a deficiency of heat or vital force, and increased this power to cure them.

It is testified that "Cullen was feeble and hesitating at the bed-side of the sick." Thomson says of himself, "I am convinced that I possess a gift in healing, because of the extraordinary success I have met with.

Look at his theory, and who will deny, that although simple, it does not correspond with nature? "I found" says he "That all animal bodies were formed of four elements. The earth and water constitute the solids; and air and fire, or heat are the cause of life and motion. That cold or lessening the power of heat is the cause of all disease; that to restore heat to its natural state was the only way that health could be produced; and that, after restoring the natural heat by clearing the system of all obstructions, and causing a natural perspiration, the stomach would digest the food taken into it, by which means the whole body is nourished and invigorated, and heat or nature is enabled to hold her supremacy."

Let no scientific pretender interpose here his objections upon *ultimate elements*, as has been very gravely done in the Legislature of New York. When we deal with organic bodies, we must deal with proximate elements.—This division of animal elements is practical, ancient and common sense.

When we consider that repeated bleeding, expectoration, and other evacuations, thin the blood and prepare the way for their continuance, producing lassitude debility, and death; and that this is all ended by a diminution of the solids, and an increase of the fluids, in proportion; or in more analytic words of our author, a diminution of the earth, and increases the water, how can we blame him for saying that "a state of perfect health arises from a due balance of the four elements; but if it is by any means destroyed, the body is more or less disordered.

When we consider a lifeless body and find that the earth, and water, and air, are there, but that the *heat* is gone, how can we blame him for saying, that to our agency at least, "Heat is life and cold is death?"

With this theory and a new and unheard of system of medicine, Thomson went forth in the practice of healing

against the world. In the year 1805, we find him in full practice in his native and neighboring towns, when a fearful epidemic prevailed supposed to be the yellow fever; the regulars lost about one *half* of their patients and he lost *none*.

After this he continued his practice in the various chronic diseases of the country—Consumption, bleeding at the lungs, fevers, dysentary, dropsies, cancers, fits, &c., seemed to yield before his skill as by a new and magic power; in fact he was afterward thought to be a wizard.

In 1806 we find him entering the city of New York, with the true spirit of Hypocrates, to investigate the nature of the yellow fever; and he found it to yield before his remedies like any other disease.

On returning again to his home he found his character defamed by the slanders of a neighboring physician. Attempting a defence, he was foiled by intrigue and perjury; and wounded in his feelings, he resolved to give up his ungrateful neighbors to their fashionable doctor; upon which he tells the following serious story:

“A curse seemed to follow them and his practice; for the spotted fever broke out in this place soon after, and the doctor took charge of those who had sided with him against me, and if he had been a butcher and used the knife there could not have been more destruction among them. Two men who swore falsely in his favor, and by whose means he got his cause were among his first victims; and of the whole that he attended about nine tenths died. He lost sixty patients in the town of Alstead, in a short time.

I attended the funeral of a young man, one of his patients, who had been sick but twenty-four hours, and but twelve under the operation of his medicine. He was as black as a blackberry, and swelled so as to be difficult to screw down the lid of the coffin. When I went into the room where the coffin was the doctor followed me, and gave directions to have the coffin secured so as to prevent the corps from being seen; then began to insult me to attract the attention of the people. He said to me, I understand Sir that you have a patent to cure such disorders as that, pointing to the corps.

I said no, and intimated at the same time what I thought of him. He put on an air of great importance and said to

me, what can you know about medicine? You have no learning. You cannot parse a sentence in grammar. I told him that I did not know that grammar was made use of in medicine, but if a portion of it is so much like the operation of ratsbane as appears in this corps, I should never wish to know the use of it. 'This unexpected application of the meaning of what he said, displeased the medical gentleman very much, and finding that many of the people present had the same opinion that I had, irritated him so much that he threatened to horse whip me; but I told him he might do what he pleased, providing he did not poison me with his grammar."

Those only, who have experienced the sorrows common to original genius, can imagine what were the feelings of Thomson, as he turned away from the ridicule, and base ingratitude of the people of his native town, among whom he had practiced five years without losing a single patient, to seek for occupation amid the cool indifference of unenvying strangers.

After collecting a supply of medicines on Plumb Island at the mouth of the Merrimack River, we next find him attending the wife of a Mr. Osgood, at Salisbury, Mass., who was given over to die of a lung fever by Dr. French. Thomson performed a cure in about twenty-four hours, which gained him much credit with the people, and laid a lasting enmity between him and Dr. French.

At this time also we find him making the first pupil practitioner, Mr. Hale, an intelligent man, a chemist and preparer of mineral medicines. But he renounced them and soon found himself usefully employed in Thomson's practice.

This might well be considered as a hopeful presaging of the tribute that science was to pay to his system in after years.

Next we find him introducing the practice at Jerico, Vt. On the following autumn a mortal disease afflicted this town, in the form of dysentery. Out of twenty-two patients, the physicians had lost twenty. The people were alarmed; and holding a consultation, concluded to send for Thomson, who was then at home in New Hampshire.

He soon arrived, and conferring with the select men, who

Had the charge of the sick, was furnished with two assistants, and in the course of three days commenced practice upon thirty patients; all of whom recovered excepting two, who were dying when he first saw them.

What a triumphant victory was here! Taking the name of the town as a hint, one cannot help associating it with the spying out and eventual triumph of Joshua at Jerico of old.

After this he practiced with his usual success in several places, and then returned to Salisbury; and although he was often called to introduce the practice in other places, yet he made this place a sort of home, and practiced with such success upon the incurable patients of the regulars that they became alarmed; and Dr. French taking the lead resolved to destroy him.

After attempting to decoy Thomson to his house, and failing, he next publicly swore that he would blow out his brains if he came into his neighborhood; at the same time saying that he was a murderer and he could prove it. To defend his character, Thomson caused an action to be brought against this tiger-like doctor for his threats, which resulted in his being bound over to keep the peace; and, another for defamation, in which perjury and the influence of the doctors prevailed against Thomson.

The council of French enquired of the judge if Thomson was not liable to arrest; to which he answered in the affirmative. This paved the way more completely for the malice of Dr. French, who afterwards procured an indictment for willful murder against Thomson. Soon after the above mentioned trial, he had the misfortune to lose a patient, under the following circumstances:

He was called to attend a young man Mr. Lovett, who was in a fever with very unfavorable symptoms.

Thomson improved him so much in two days that he went out, exposed himself and was taken much worse.

Thomson was again called, but he soon found he was past cure; and then two regulars were called, who attended about twelve hours, when he died. For this he was arrested as a murderer, put in irons, carried to Newburyport jail, confined in a dungeon, cold filthy, and filled with vermin, without a fire in the month of November, and

without the prospect of a trial for nearly a year Thomson had established the fame of his practice in the cities of Portsmouth, Newburyport, Salem, and the adjoining villages, so that many powerful friends rushed to his rescue ; but among these there was none more distinguished than the grateful and the indefatigable Judge Rice, whom he had cured of a dangerous fever, This gentleman procured a special session of the court and assisted Thomson in his trial by which he was honorably acquitted, after having been about one month in prison

In a subsequent prosecution of Dr French for abuse and slander while he was a prisoner, the defendant went about and took depositions wherever Thomson had lost a patient, but found only eight, Lovett included ; these he brought forward in the trial as charges of murder ; and although Thomson proved that they were incurable when he first saw them, or given up by the doctors to die, yet the court gave the testimony against him, and French was permitted to call him a murderer.

Such is the value of courts to an enterprising genius when he must wage his way against the interests of a popular profession ; and such the ingratitude of the world to one of its greatest benefactors.

In these troubles, Thomson lost in five years as many thousand dollars. But nothing could discourage his onward way.

Passing over, as we do, many of the minor events of his history, we have next to notice the conduct of one of his first agents. He had established an office and a flourishing practice in Eastport, into which he put a young man whom he had raised from poverty and sickness. He was to have half of the profits, but not content with this, he usurped the whole ; and also offered the knowledge of his system to all who would buy of him.

At the same time there was a petition sent to the legislature to prevent quackery, in which Thomson was named.

These difficulties at length induced him to go to Washington and obtain a patent for his discoveries ; which he accomplished in 1813.

This added a new stimulus to his enterprise ; and under the patent, the sale of rights began to spread the knowledge

of his system throughout the United States. An instance of their utility with another astonishing triumph of the practice occurred in 1816.

Thomson went to Cape Cod to collect medicines, and found the people dying for want of them. The spotted fever or, cold plague, as it was called, had broken out and was very mortal. The small village of Eastham lost forty-six in three months. Thomson cured a number—sold the right to two men, and offered them the right of the whole town for the price of twenty—but it was not accepted; as the fever was declining. He then returned home, but was soon after recalled with the greatest haste; for the disease had broken out with redoubled violence.

He soon found enough to buy the twenty rights, gave them instruction in public lectures; and with the people to assist, Thomson and the first two right holders attended thirty-four cases; and lost but one; while the regulars lost eleven out of twelve. These facts are attested by the ministers, the select men, justices of the peace, and post masters.

But it was simply done, ignorant people could understand it, and the regulars have uniformly despised it.—[There are a few noble exceptions.] Thomson in turn, with the design of preserving his system in its purity, has forbidden his agents to sell his rights and books to regulars, or their students.

Thus, from a two-fold necessity, this system had to go into the hands of comparatively ignorant men.

Many of these, in the course of time and experience, became distinguished physicians; and forming into societies in the various states, established fixed rules for the education of students; these in turn have contributed to advance the standard of medical knowledge among them; and eventually we shall have a profession with as great and varied attainments, as the regulars. It is now a very common saying, made to our better class of practitioners.—“Your system, I believe, is a very good one, but it has been injured by every one going into it who did not understand the human system.” They condemn the ignorance of our early practitioners. Let them carry out their principles. Not one seventh of our physicians, have so ex

tensive a knowledge of anatomy, chemistry, &c., as the regulars. Say to these two thousand practitioners, stop your labors, and go to college. What would be the consequence? Thousands must die, while they are getting an addition to their knowledge, not worth so much as a penny to a dollar, compared to what they already know.

Whoever considers the necessity of the immediate diffusion of this system among the people, its early circumstances, that the ignorance of its practitioners could not have been otherwise, and the history of its *progress*, should be struck forever dumb to the utterance of the stale, and stereotyped slang against patent doctors and right holders.

Those Thomsonian practitioners, too, who look with sneers and contempt upon this class of pioneers. should be regarded as ungrateful as the tiger which snaps at the hand that gives him food; for it is upon their shoulders that they have arisen, and been sustained in their practice.

But the knowledge of this system must eventually become public property; and thus the basis of a most exalted medical science; no thanks, however, to those who would keep the practice in their own hands.

Already have more than one hundred regulars embraced it. About a dozen periodicals are published in its support. It numbers two colleges, one in Ohio and one in Georgia. According to the estimate of Dr. Waterhouse Thomson has lived to see three millions of his own countrymen bless the day that he was born. He has lived, too, to see his system carried into the old hemisphere, and, in gold medals, receive the compliments of the kings of Europe.

He who shall attempt to rob him of his hard earned honors, must submit his own name to be "scathed with lightnings of public indignation" by the people of coming ages.

What if it should appear that the vapor bath had been used before in the remote parts of Europe? What if it should be proved that lobelia had been previously used by certain Indian tribes? What if cayenne had been mentioned in some medical works? if Thomson learned these things by his own experience, are the discoveries any the less his? Echo only answers.

To have been no more than the discoverer of the emetic

virtues of Lobelia, should have distinguished his name:

To have only laid the basis of the system for others to complete, should have made him great:

Or completing it, to have left it for others to demonstrate and make popular, should have made him immortal:

But to have discovered the elements of a *materia medica*, to have formed them into a system, governed it by a theory, holding all in his own hands, with a strength and perseverance common only to giant intellect, and bringing it to bear with overwhelming success against the world of perverted, and perverting regulars, has placed the name of Thomson on one of the loftiest and most unapproachable pinnacles of *fame*.

Opinions of the learned.—Dr. Waterhouse, for twenty years professor of the theory and practice of medicine, in the University of Cambridge, Mass., regarded in Europe as a philosopher, and a member of many distinguished societies; in a letter to Dr. Samuel Thomson writes thus; “I remain firm in the opinion that you were the discoverer of the *remarkable* medical virtues of the *Lobelia Inflata*; that yourself were the originator of the compound process, very extensively known under the title of their Thomsonian Practice or system. I mean the uniting the vapor bath with the cleansing of the whole alimentary canal.

I value it on this account. *It effects in three or four days, what regular physicians used to occupy as many weeks to accomplish.* Your discovery is highly valuable, and on this account it was that I spoke so freely and strongly in commendation of the new practice; and was not ashamed to hail you as a REFORMER.

Again, in a letter to Dr. John Thomson, he writes thus; —“Had not the theory and practice of your father been founded in *Truth* and *Nature* it could not have maintained its reputation thus far, but would, long since, have been swept into nonentity. Yet amidst opposition, and even persecution, Dr. Samuel Thomson has had the solid satisfaction of knowing that *Time has increased his reputation*, and imparted firmness to a practice hitherto unheard of among us. I pronounce him a PUBLIC BENEFactor.”

Thomas Hearsy, for forty years a regular practitioner; surgeon in the United States army during the last war:

elected surgeon extraordinary to the Petersburg Volunteers, and Major Stodard's Artillery; one of the founders of the Western Medical Society of Pennsylvania, and lastly a distinguished Thomsonian author and editor, in a letter to Dr. John Thomson, writes thus;—

“My practice has been extensive—my experience and opportunity for observation has seldom been exceeded; but I venture to pledge myself upon all I hold sacred in the profession, that in my estimation the discoveries of your honored father have a decided preference, and stand UNRIVALLED *by all that bears the stamp of ANCIENT or MODERN skill!*”

Thomson still lives; residing in Boston. *Peace*, to the evening of his life; and may HEAVEN grant him a *happy MORROW*

CHAP. III.

NATURE OF SCIENCE, AND ITS ERRORS IN MEDICINE.

Man was made to reason. Through all his life, his knowledge is slowly *acquired* by *experience*; while on their first days of existence, that of the lower animals, is *inherited* by *instinct*.

He knows not the use of his hands, or feet, until observation has taught it; he has no idea of distance until experiment has proved it; and this is the beginning of science. Related to all things of which he can form ideas, he has especial faculties; yet, at first uneducated, and subject to the force of circumstances; which, to preserve his dignity, he must, in turn, subject.

If man did not learn by experience, he would not be liable to error, and, therefore, could not reason; all things would be to him but truth unknown, and error could not be suggested.

To distinguish between truth and error, then, is the work of reason; the element of reason, then, is observation; *and OBSERVATION, then, is the foundation of all human KNOWLEDGE.* As a consequence of this order of things, man, made in the image of HIM who can do "What ever HE will," has the power to abuse and pervert all the faculties of his soul, all, the powers of his body, and all things within the circle of his influence.

The greater the good of any blessing, the greater will be

the curse of its perversion. Of all the departments of man's mind which we may separately consider, perhaps there is not so great a subject of perversion as his reason. It seems that it must take six thousand years to teach him its fundamental principles.

Intellect is a compound set of faculties perceptive and reflective, acting and reacting upon each other.

In perception, he is liable to adopt false facts ; and in reflection he is prone to imagine false relations. He is either too indolent, too self-conceited; or, perhaps, more properly, too ignorant, to pay that careful and circumspecting attention to the subject matter of reason, which is necessary for drawing conclusions according to the relations of cause and effect.

All that he does calls for improvement and perfection ; *and above all things* OBSERVATION *should be rendered perfect by demonstrating* EXPERIMENT.

But, unfortunately, such has been too little the case ; he has drawn the *conclusions* first, and then warped *facts* to them.

Such was the fate of science in the brightest days of Grecian and Roman glory.

Aristotle gave the most prominent example of withdrawing from the field of observation, and cogitating philosophy in the closet of intellectual fancy. The example was redily followed ; and the inventing of hypotheses, and the wresting of facts, became the curse of science. Even after the revival of learning from the dark ages, the meteor light, which gleamed from the works of Aristotle, became the guide of the schools ; until the telescope genius of Gallileo showed by the sun light of facts, that those hypothetical creations were more false than the mirage of the desert until the giant mind of Bacon, the philosopher of philosophers, had taught the world the conclusive methods of inductive reasoning ; yes, and in some measure down to the present time ; for the world is slow to learn.

Excepting religion, there is no department of science so great as that of medicine ; and none so greatly perverted.

In most barbarous nations the sick have been led to place the most credulous reliance upon the charms of an amulet, or the phantastic ceremonies of a juggler.

In the early ages of Egypt and Greece the history of medicine is so beclouded with fables and the doctrines of magic, that little satisfactory knowledge can be gleaned from it.

It is true that the age of Hyppocrates is a bright page in the history of the science.

He introduced new and simple remedies into practice.—Why was he not a quack? When the plague was sweeping away the people of Athens, he entered the city like a conqueror. To purify the air, he caused fires to be built in the streets and lanes. With the warm bath, he dispelled the disease from the sick, by the pores of the skin.—The convalescent he nourished with the rich wines of Naxos; and thus banished the plague from Athens.

This was natural; this was simple; this was great! Hyppocrates may be considered a parallel with Bacon in saying that "It is not in the works of philosophers, nor in the dust of schools, that we are to learn the difficult art of interrogating nature; and the still more difficult art of awaiting her answers"—a parallel with Thomson, in saying that "Nature is heat;" and that "Experience alone is less dangerous than theory without experience."

But Hyppocrates was more a creature of genius than of science; for his pages contain many absurdities which characterize the Aristotelian Philosophy.

All who succeeded were the disciples of Hyppocrates, until the time of Galen, who greatly extended botanic knowledge. But soon after the Roman Empire was broken. The barbarous pagans overran its western kingdoms; and the mad Mahomedans, those of the east.

The arts were trampled underfoot, and the sciences well nigh forgotten.

All things were perverted. Religion lost its purity; and was deeply dyed with paganism. Government was turned to tyranny and anarchy. The art of curing disease was lost in the wide spread work of destroying life. In the language of the elegant Robinson "Through a long and dreary night of a thousand years; in those awful scenes of broil and battle, there was no time to die of disease."

When the light of learning began again to dawn, and

the arts of peace called again to the study of medicine, it was only to receive still further degrees of perversion.

It was in this age, that physicians left the study of the *laws of the living man*, to pry into the *structure of the dead body*.

The former, *physiology*, the basis of the *practice of medicine*; the latter, *anatomy*, the basis of the *art of surgery*. A little understanding of human nature will easily show, how it was, that students, going from the colleges, with their minds impressed with the scenes of dissection and the splendid instruments of surgery, would, at the bedside of the sick, be induced to be *mechanical*, yea, *murderous*, rather than *natural* and *nurse like*.

It was in this age that Paracelsus arose, with his mercury, antimony, and other chemical poisons, a reckless experiment, a swaggering impostor, an intemperate vagabond, whom the Medical Dictionary says was a "Material service to medicine."

It was in this age that the physicians left the medicines prepared with our food in the laboratory of nature, pretending to receive better from the hands of the sickly miner; or to search for a catholicon amid the transmutations of the alchemist.

And, then, the art of relieving the *effect* instead of removing the *cause*, was reduced to a science "falsely so called." Then physicians began to take away "The blood which is life," according to Sacred Writ, to save from death.

It was in this age, that finally, all medicines, whether vegetable or mineral became declared to be poisons. It was from this dark age of misery and death in all its forms that we have received the rudiments of that system of medicine, which claims to be regular and scientific.

Let no one deem this an invidious view of the past; for while evil remains, the march of intellect must be onward; and if so, then each succeeding age must look back and derive wisdom from the errors of the past.

It is true, that in the seventeenth century, Gallileo and Bacon had introduced a new era in the nature of science; yet, its patrimony was principally expended upon the mechanical department; while physiology and pathology were

left to find a residence in the airy castles of hypothesis.— This no assertion ; Liebig, a late german writer, speaking on this very subject, says, “The most exact anatomical knowledge of the structure of the tissues cannot teach us their uses ; and from the microscopical examination of the most minute reticulations of the vessels, we can learn no more of their functions, than we had learned concerning vision from counting the surfaces on the eye of the fly.”

Again he says “With all its discoveries, modern chemistry has performed but slender services to physiology and pathology. * * * Physiology took no share in the advancement of chemistry, because, for a long time, she received none from it.”

The great Jefferson, speaking on the same subject, says, “From the scanty field of what is known, the adventurous physician lanches into the boundless regions of what is unknown. * * * I have lived to see the deciples of Hoffman, Boerhaave Stahl, Cullen and Brown, succeed one another like the shifting figures of a magic lantern.”— These, for several ages, successively overturned each other ; each promising itself immortality, and showing the last to be but “The baseless fabric of a vision.”

The difference between the theories of these authors and many others are to irrevelant to our great subject to be noticed here ; excepting that there is an even tenor of Aristotelian error which runs through them all, taking for granted that poisons, depletive and antiphilogistic methods, were the proper remedies for diseases ; which was never proved. From Paracelsus of the sixteenth century down to the distinguished Liebig of the present moment, these unfounded assumptions have been the stumbling block of the faculty. What ! says one, include Liebig. He writes especially against hypothesis

Does he not say that “Medicine, after the fashion of the Aristotelian philosophy, has formed certain conceptions with regard to nutrition and sanguinification ; but these theories being founded on observation destitute of the conditions most essential for drawing just conclusions, cannot be received as expressions of truth.” It is true, but he puts into our hands a weapon against himself ; for he recommends, bleeding ! yes, blisters, seatons, and the anti-

philogistic treatment in general, as the best that could be devised in a certain class of disease; which has been demonstrated to be highly erroneous by long repeated experiments this side of the Atlantic.

* If an intellect like Liebig's should be so subject to error, we too, cannot expect to escape, in every degree, from the deception of *false facts*, or even from *false conclusions*.

This brings a question of the utmost importance to every physician—to every person—the very starting point of Truth and Error!!

Why is it that medical science has received so little benefit from inductive reasoning? IT IS IN HYPOTHESIS, THE ASSUMPTION OF A MULTITUDE OF INDEPENDENT PRINCIPLES; AND THEN IT IS IN FACT THE ALMOST ENTIRE IMPOSSIBILITY OF UNIFORMITY IN THE CONDITIONS OF ITS EXPERIMENTS! AND, ALSO, THE MULTIPLICITY OF CAUSES AND EFFECTS OPERATING TOGETHER IN A MANNER SO OBSCURE AS TO RENDER IT EXTREMELY DIFFICULT TO DISCOVER THEIR RELATIONS; to say nothing of causes unknown.

When demonstrations are difficult, error will be specious. Although we have an intuitive sense of causes, we have not an instinctive knowledge of them.

Observation, only, can teach them. Without a previous knowledge of light, the rising of the sun for the first time should not be sufficient to convince us that it is the cause of day. NOTHING BUT REPETITION OF AN EFFECT UPON THE CONTINUED APPLICATIONS OF A CAUSE, INSOLATED FROM ALL OTHERS, CAN ESTABLISH THE RELATIONS BETWEEN THEM. To the physician who has assumed many independent principles of disease, these laws of philosophy can present but little hope; but to him who seeks for the general principles of nature, their application will be very successful.

These things should make physicians of the first class highly prudential in advancing their opinions and prescriptions; not only for regard to truth, but because upon their subject often pends the fate of life.

* The errors of Liebig will be more critically examined in our chapter on pathology.

Fallax experientia, exclaimed Hippocrates of his predecessors. *Fallax experientia*, exclaimed Paracelsus.—*Fallax experientia*, exclaimed Brown.

From Toth of fabled day, to Liebig in the present age of science, this *false experience* in medicine has abounded and been acknowledged by its best authors. Abercrombie, author of "Intellect Powers," says, "The difficulties and sources of uncertainty which meet us at every stage of our investigations, are so numerous and so great, that those who have had the most extensive opportunities of observation, will be the first to acknowledge that our pretended experience must, in general, sink into analogy, even our analogy, too often into conjecture."

Dr. Dodd says that "medicine has never known the fertilizing influences of inductive logic."

Dr. Harrison says that "reason and common sense are never brought to bear upon it." Lieutand "give it all up and begin anew." Dr. Waterhouse calls it "learned quackery." Dr. Chapman "absurdity, contradiction and falsehood." Dr. L. M. Whiting, "a perfect chaos, destitute of hardly one solitary, well established fact." De Alembert a "striking in the dark." Abercrombie "the art of conjecture and the science of guessing." And to crown all, it has become a by word that this proud science is "A GLORIOUS UNCERTAINTY."

And what are the effects? One professor says that "every young physician kills his way into practice." Chapman calls it "murderous quackery;" and Good says "IT HAS DESTROYED MORE LIVES THAN SWORD, FAMINE AND PESTILENCE."

If partial views of it, as Dr. Brown says, are "altogether uncertain." If in "new cases" as Dr. Abercrombie says, "it is doubtful whether we act from experience." If, as professor Jackson says "EXPERIENCE CANNOT EXIST IN MEDICINE, why then could they not have applied inductive science in an abstract way—compared aggregates—the length of the lives of the sick who are attended by physicians with those who are not. It is already done; and the statistics of France have told the world that "THE DOCTORS KILL MORE THAN THEY CURE."

Ah, says the reader, this illy comports with offering a

work to the public on medical practice. Humanity calls loudly for its suppression—that physicians be banished; as they once were from Rome for five hundred years.

But remember, reader, this appalling view of science is “regular science” from “regular authors.” The case lies now before us, widely, widely altered. The regulars had always operated in the *negative*; they had taken away *light* that *darkness* might be the less *blinding*; they had taken away *heat* that *cold* might be the less *freezing*.—Like the ancients who thought the torrid zone uninhabitable, they never dared to venture beyond their imaginary clime.

But the Thomsonians, despite the heat, have gone boldly over; and have operated on the *positive*, with opposite demonstrations. The sick are not killed, but cured. Medicine is no longer “a glorious uncertainty,” but “a fixed science.” We cannot be mistaken as to the *cause* by which the natural difficulties of the science have been wrought to such a climax of doubt, intricacy and paradox, when we consider the erroneous course its professors have taken.

When we consider that Abercrombie doubted whether we could act from experience in new cases, we discover at once the total want of a general guiding principle, we discover the effect, or conclusion of that false system of facts, which discriminated and divided disease into hundreds of kinds, with the supposition that each must be treated differently, as though they had different causes.

It is manifest that the adoption of such a principle as this must involve the practitioner in a wilderness of uncertainty.

But this principle seems not to have been doubted until the time of Brown; nor successfully abandoned until the time of Thomson.

Again when we consider their paradoxical adoption of poisons in the name of medicines, and that Hooper says, soon after the time of Paracelsus, the abuse of them became so great physicians fell into the opposite extreme of inefficient doses, and that again they had fallen back into a medium ground where he supposed the truth of the subject lay, and when we consider, that whether the doses were large, small or medium, they were poisons still, we shall

then see that thus they would be "Ever learning and never able to come to the knowledge of the truth."

Again, when we consider that the legitimate phenomena of disease is debility and decay ; that the phenomena of fever, pain and spasm, are, to speak with a figure, efforts of Nature to overcome disease ; and that it is against the latter physicians have principally directed their efforts ; that they have operated upon the *effect* instead of the cause ; we shall in view of the error derive a salutary view of the truth.

When we consider that quelling the efforts of nature destroys the appearance of disease, that bleeding will reduce the pressure upon the vessels and pain in many cases, that sedatives and narcotics which reduce the activity of the vessels will also reduce pain, and that poisons which produce debility will reduce fever, will be followed by coldness and even death, we shall then discover how physicians have been *beguiled* into error, and were induced to persecute the laws of life, thinking they did the God of Nature service.

From the starting point of truth and error before mentioned, aided by the natural difficulties of the science, physicians have gone on in a course of barbarous *analyzation* without ever returning on the road of *generalization* to the practical grounds of certainty. This passion for minute distinctions, doating, detached and whimsical in many cases, began with Galen and reached its climax with Cullen.

Brown the deciple of Cullen endeavored to extricate himself from this wilderness of error ; and at a single blow he reduced all diseases to two classes ; sthenic, and asthenic, or diseases of excess and deficiency of action, which were to be treated by opposite methods. It is plain from the facts upon which this theory is founded that there are intermediate states of disease in which it must have puzzled Brown himself to tell the class to which they belonged ; and yet these cases are far from constituting health, which shows conclusively, that there is not even two, but only one general principle ; and that the distinctions of Brown were founded on the difference of degree. Moreover it is plain that there can be no excess of action unless it be too great voluntary exercise, which is only an exciting cause of dis-

case, of which there are too many to be numbered, but their effect, or the general principle of disease is always deficiency of action.

From this general principle, or focus as it were, we may diverge out to a great variety of exciting causes, on one hand, and to a great variety of effects on the animal system, on the other.

Brown's theory had one redeeming quality. He was induced to place the majority of his diseases in the asthenic class, and consequently to recommend stimulants.

But what a list of medicines of this class had the false experience of ages accumulated.

With such miserable apologies for stimulants as brandy, wine, and opium, it is no wonder that his system should prove so much a failure. But notwithstanding it was quite an improvement; and we can discover traces of his reasoning among most of the modern schools. Out of the truth and falsehood of the Brunonian theory, Rush undertook to frame a system more reconcilable with reason. From reflections, probably similar to what we have given, he resolved that DISEASE IS A UNIT; but this, with his two opposite modes of practice, only served to complete a paradox.—How did his improvements succeed? He used Calomel, Jalap, Blood-letting, cold drinks, and low diet upon the yellow fever in Philadelphia, and Cobbett states that he lost at least sixty patients out of every hundred; and how can it be doubted; since he lost four out of six in his own family. Brown promulgated his system about the time Thomson was born.

The next radical improvement was attempted by the Hahnemann of Germany.

While Thomson in America, untrammelled with *false learning*, was striking out a new but certain course in the almost untrodden field of nature. Hahnemann, in endeavoring to reconcile the discordant theories of European writers, and establish some systematic principles of materia medica, at length struck upon a path of hypothesis, and facts misapplied, perfectly characteristic of the *terre incognita* in which it commenced. One of the most striking features of this system, is, giving medicine in infinitesimal doses. A grain of mercury is mingled and commingled

with sugar of milk until a grain of the compound will contain only a millionth or a billionth part of a grain of mercury. It is a universal law that *size or quantity, all else equal, is a measure of power*. If there is any principal in medicine which can contradict this, we have it yet to learn by an *experience* perfectly new. However, since poisons are not medicines, Homœopathy must be considered a great negative improvement; and is a plain reason for its success where medical truth is little known. It lets more patients live. Another feature which the Homœopaths are fond of presenting, on account of some plausibility, is, that any *medicine proper for a particular disease should produce the symptoms of that disease in a healthy state*. It is now established that all the *active* symptoms of disease are but the phenomena of effects, or secondary causes, which tend to result in their removal; or to speak with a figure, which we shall hereafter use, "Efforts of Nature" to overcome some difficulty.

If the body is in an inactive or diseased state, and we give such medicines as are calculated to remove it, such as stimulants, and tonics we shall in many instances increase the symptoms of disease, or visible efforts of Nature, which must continue, whether apparent or not, until the disease is gone. This corresponds with the doctrine of Hahnemann.

Again, if a healthy person be exposed to cold or poisons they meet with the reacting efforts of Nature and disease appears. This, too, corresponds with the doctrine of Hahnemann. We see then, that his rule admits, alike, of natural or deleterious agents. It is a wide mistake, for it is perfectly ambiguous.

Within a few years another class of medical reformers have sprung up in Germany, whose *materia medica* consists solely of pure water. This practice had been pursued to some extent in this country, but not so well systemized nor so thoroughly applied. It appears to be perfectly congenial with life; of which the reasons will be given in our chapter on therapeutics. It is also to be observed that the whole medical faculty have swerved in a measure from their violent modes, and have fallen into a more physiological and preventive treatment.

In our country there has still another class arisen with Graham and Alcott at their head, who confine the improvement of health almost totally to dietetic, and gymnastic regimen. Excepting, perhaps, some errors with regard to vegetable diet, their *positive* principles should be adopted as the basis of medical knowledge. Their *negative* principles however, in rejecting all medicines, and despising what they are pleased to call "dosing and drugging" and "Thomsonian patch work," must be considered "ultraism."—While the Thomsonians are redily adopting their *preventive means*, they will not, so long as they live in a world of malaria, contagious poisons, cold and storms—so long as they have seen their *curative means* so successful against the diseases that follow them, be ready to give up their lobelia, cayenne, bayberry and vapor bath. The reader will better comprehend the mistake of the Dietetic school when he understands that they are a secession from the regulars. Where all medicines contained the principles and demonstrations of *death* it is no wonder that the maxim "the less medicine the better" should become to mean *none at all*. The history of Dr. Jennings of Connecticut, a prominent one of this school, is a complete key to it. Finding his practice deleterious, conscience bade him prescribe nothing but *bread pills* and *colored water*. He became much more successful and celebrated. Conscience again compelled him to divulge his practice to his neighbors; *and he lost it*. The *negative* seemed no more a *positive* but *nothing*.

But again to return to the nature of the science, we must observe that although in the Thomsonian Practice it is pleasingly certain, yet it still has its imperfections and difficulties.

When a physician proposes to give a patient a dose of medicine at night, but does not, and the patient is well in the morning, we must perceive, that, had the medicine been given, the cure would have been assigned to that.

Again if a patient takes medicine, and then from cold, or accidental circumstances becomes worse, the damage may be ascribed to the medicine. Thus we see that *we are in danger of assigning effects to causes when there is no relation between them*.

A more complicated case of this principle appears when the *effect* concerned stands in an indirect relation to the *cause*. A patient rejects boiled mutton as a diet, but uses plentifully of butter because one sits hard and the other light upon his stomach; whereas the butter may be the very cause of the mutton setting hard, and the mutton in turn, notwithstanding its *apparent* harm, may be the very means of restoring the strength of the stomach. Just so a lady will take tea to cure the head ache when its excessive use has been the cause of it. A notable instance of this error appears in the case of Dr. Brown, who used wine and high-living for the gout; when it is the very cause of it. On the same principle a drunkard should take rum for the delirium tremens; and in fact, inasmuch as the disease is an indirect effect, the rum will have some apparent tendencies to cure it.

These difficulties still cause considerable misapprehension in the Vegetable Materia Medica, a prominent instance of which is found in the use of cathartics. There is much ignorance with physicians with regard to medicines which they have long used. *Truth is never proved from the suggestions of a solitary hint.* For instance mayweed and pipsisewa are said to be excellent medicines, but they both will blister the skin and act on the urinary organs, so also will spanish flies which are highly deleterious; and the conditions of the experiments with the first two are not such as to prove they are not alike injudicious. The knowledge of vegetables is miserably defective on this point. We need a thorough institution of experiments in this behalf; not only as regards plants unknown, that waste their virtues on the desert air, but with many long in use.

We should never draw general conclusions from single circumstances.

The ignorant often make this error in judging the Thomsonian Practice.

Just weigh the AGGREGATES of our practice with that of the regulars and the ballance turns, as ten to one, in our favor. Let us admit all the use of regular errors, in which, in *analyzing differences* they have forgotten the *generalization of resemblances*. Let us admit all the uncertainties of our own school, and take the *aggregate* of our ex-

periments and we have left us the following great, general principles:

LIFE, *to our understanding*, IS ACTION ; AND DISEASE IS A DEFICIENCY OF ACTION..

HEAT IN THE EGG, OVUM, AND GERM IS THE FIRST CONDITION OF ACTION ; AND HEAT AND COLD STAND, TO OUR AGENCY AS THE FIRST CAUSES OF LIFE AND DEATH.

Disease is merely the NEGATIVE of health, therefore medicines must always be POSITIVE ; they must increase action.

THAT WHICH HAS A LEGITIMATE TENDENCY TO PRODUCE DISEASE CAN NEVER BE MADE TO CURE IT.

PART II.

CHAP. I.

PHYSIOLOGY, OR THE LAWS OF LIFE.

This important branch of medical science is the ground work of the *practice of Medicine* ; as anatomy is of *surgery*. In the full latitude of the word, the philosophy of disease and medicine may be considered as only a part of physiology ; so that the science of life divides itself into two general divisions, anatomy and physiology—the one, *the structure of the dead body*, the other, *the actions of the living man*.

Although anatomy has furnished much colateral support to physiology, yet the latter has always established its principles in the first place within its own natural province, which is, and ever must be, the study of the living animal. Scientific research, so far as regards man, can prove no important thing to the physician which may not be learned by common observation. When we consider that this must be the case with all analysis and experiment, we shall not wonder that science is compelled to bring such tokens of homage to the feet of Samuel Thomson.

After learning the nature of the elements concerned in any science, our next great object is to learn its general principles.

The most prominent and striking general principle in physiology is the *unity* or *oneness* of the different parts and systems of the body. This must be strongly impressed upon the brain of the medical student before he is fit to proceed far in his study, or is capable of being trusted in practice.

Chemical analysis shows the animal body to be composed of two classes of

ELEMENTS.

First—The ultimate elements, or simple substances, such as carbon, hydrogen, oxygen, iron; common to universal matter, and then, compounded of these, proximate elements, such as albumen, fibrin, gelatin &c., peculiar to organic beings.

The relations of the human body to the ultimate elements of the external world; and of its proximate elements to its own internal actions, are objects highly worthy of our attention.

The most important ultimate elements, are, Oxygen, Hydrogen, Carbon and Nitrogen. The less important, are, Phosphorus, Sulphur, Chlorine, Flourine, Lime, Potash, Soda, Magnesia, Silex, Alumine, and Iron.* The first class constitute by far the largest part of the body; and accordingly we find them abounding in air, water, and plants as the principle active elements around us. The second class compose a much smaller part of the body, and accordingly we find them existing in much less quantity, especially in circumstances of *relation*.

Sulphur, for instance is always found in small quantities in albumen. It also exists in small quantities in many fountains and in most plants.

Iron is the basis of the coloring matter of the blood; accordingly we find it in all plants; and composing one per cent of the soil.

Soda exists more largely in the body than potash, and is found to be more congenial with it. Muriatic acid is one

*It is true that some of these elements are compounds.—Soda, for instance, has a metallic base called sodium united to oxygen. But as they are not decomposed by the vital powers, so it is proper to speak of them, for all practical purposes, as ultimate elements.

of the most mild of that class of substances upon the organism, scarcely effecting any of the tissues, but the osseous ; and in the wisest relation, we find that this acid, united to that mild alkali, soda, constitutes that indispensable article of our food, common salt. The same relation exists between our bodies, our food, and the other elements mentioned.

Thus we see that all the ultimate elements of the human body are not legitimately poisonous.

But the great line of distinction between plants and animals, which is that the former subsists alone upon ultimate, and the latter alone upon proximate elements, seems to indicate that we should not use them in their inorganic state. The difference may be seen between lime freshly calcined, and that combined in the egg shell, plants, &c.

On the other hand, we find that all those elements which do not compose a part of our bodies, such as arsenic, antimony, mercury, copper, lead, &c., are highly poisonous ; and by a wise provision of the CREATOR are more rarely diffused in nature.

It is only by a careful observance of the laws of life—of our relations to physical and moral circumstances, that we can be preserved from premature death ; or have our days lengthened out to the maximum of time.

But how have our relations to the elements of the external world been observed ? How have physicians regarded them in the use of their deadly mineral poisons ? Let the cripple from childhood, let the sallow victim of a diseased liver, let the decaying teeth and dimmed eye, yea, and to say nothing of death direct, let the hypo haunted wretch, with the suicidal rope, answer for the miseries of a violated life !

What reason do these physicians offer for this practice ? A few years ago in a report to the Legislature of New York, against the Thomsonian practice, it was gravely advanced, as a premises in favor of mineral poisons, that the body contained minerals ; and even bread, "the staff of life," was composed of 98 1-2 per cent. of minerals. What of that ? If it appears that plants can seize upon the elements of the mineral kingdom, and convert them to their

own use, then it is to all purposes vegetable matter, or the "spoils" do not "belong to the victors."

But then, we have already shown that it is not against the ultimate elements of our bodies or food, that our objection lies. Yet, with this premises, the faculty have strangely deduced the following proposition: Because *some* minerals are used by the animal economy in an *organic* state, as food, *all* minerals may be used in an *inorganic* state, as medicines.

We notice these reasons, because they have governed popular opinion.

We once heard a physician of reputed learning and skill, advance the same idea. Upon which we offered the following proposition. If minerals are *good* medicines because they compose a part of our system, it follows, of course, that they must be *bad* medicines if they do not compose a part of our systems; what then shall we do with arsenic, mercury, and antimony? We received no answer at that time; and we still challenge the scientific world to gainsay the proposition.

To the mass of people, for whom we write, we say observe your relations to the mineral world; for you must violate them at the peril of your physical happiness and your lives. Verdigris is an active poison. But how is it with that brass vessel in which those acid fruits are stewing; see the green circle above the liquor; see the liquor rise and fall again, and leave the place of the circle bright and clean. Can the pies and preserves of that preparation be healthy?

How is it with the earthen milk pans, glazed with lead, by which whole families have been poisoned?

How is it with a scissors chain which we saw, whitened with mercury, and wholly worn off on a lady's fingers, thus producing black oxide of mercury, or *unguentum*; of which every body can tell us some disastrous account? How is it with a thousand other things silvered in this way? Verily, a lady cannot take a pin in her fingers without getting a homœopathic dose of mercury.

How is it with the health and length of life of painters and other artists who are exposed to strange metals? and

see in the healthy blacksmith how iron is an exception.—How is it with our copper pumps, fawcets, and the lead pipe in which our water is conveyed.

How was it with the lead sickness from the lead pipe in the wells of Lowell. How was it with the palsy and cholera at New Brunswick, caused by a cargo of sugar contaminated with lead.

Well, indeed, might we wonder that the amount of health and length of life in a civilized community is not equal to that of the savages, who use no vessels but the hollow stone, and wield no weapons but of wood and bone.

That man who was well nigh killed by drinking buttermilk which had stood in a freshly painted pail, and that family, a part of whose members were recently poisoned to death by eating pie plant, cooked in brass, might well regard that time as a *golden age*, when men shall observe the laws of their relations to minerals.*

Of the *proximate* or *organic elements* we have already mentioned the principal ; and must delay to speak of their beautiful relations to the vital changes until we have given a further description of the parts of the system.

IN ANATOMICAL ANALYSIS—the first element of the human body which demands our attention are the

TISSUES.

First, the *Cellular Tissue*. This unites the different organs together ; and in a more condensed form composes all the membranes ; it forms the cartilaginous substance of the bones, into the interstices of which are infused the osseous fibre ; every muscle is covered with a sheath of this tissue, and dipping into their substance, covers every fasciculus, and again every fibre of muscle, and uniting at their extremities, forms the tendons ; the same disposition of this substance attends the nerves, so that the muscular and nervous fibre, like that of the osseous, is infused into corresponding cells of the tissue ; thus making of this substance

* Wafers, which are often put in the mouth, and sometimes eaten, are colored with a preparation of mercury ; and have been known to produce salivation. German silver is an alloy of arsenic, &c. &c.

one grand frame-work ; so that, were the other mentioned substances abstracted, the cellular tissue would preserve the entire form of the body.

The principal chemical quality of cellular tissue is *gelatin* ; and its peculiar physiological property is *contractility*. It is found to be composed of fibres which are again sub-divided into filaments ; and these, according to the microscope are composed of strings of minute globules. The same ultimate composition, of globules, is common to the osseous, muscular, and nervous filaments ; upon which we would remind the reader of the *unity* of the system.

The word tissue is used as a common term to express all the animal organism.

If we consider the cellular tissue as fundamental and complete in a classification of its own kind, consisting of membranes, tendon, and cartilage, we shall find superior to it, a gradation of other tissues, in a series of three.

The *osseous tissue*, having for its chemical quality *phosphate of lime*, and for its physiological property, *solidity*.

The *muscular tissue*, having for its chemical quality, *fibrin*, and for its physiological property, *irritability*.

The *nervous tissue*, having for its chemical quality, *albumen*, and for its physiological property, *sensibility*.

The tissues, to which, if we add the external coverings, the cuticle, nails, and hair, having for chemical quality, mucus and their physiological property, insensibility, constitute all the solids of the body.

The whole animal system may be separated into two grand divisions, *solids* and *fluids*.

The fluids may be also divided into two. The *blood* which conveys nutriment to all the solids, and the *neura* which conveys the vital forces of excitation and volition through the nerves.

The solids of the body may be divided into seven

INCRETORY SYSTEMS :

Each, consisting of two grand divisions. The *osseous system*, consisting of ossified, and unossified bones or cartilages. The *muscular system*, consisting of muscles of voluntary and involuntary motion ; or muscles of animal

and organic life. The *nervous system*, also consisting of nerves of animal and organic life. The *vascular system*, consisting of arteries and veins. The *pulmonary system*, consisting of air cells and capillaries. The *digestive system*, consisting of the superior or chimifying, and the inferior or chylifying structures. And the *absorbent system*, consisting of the lacetals and the lymphatics.

There are, also, three *excretory systems*. The kidneys, the liver, and the skin.

Of the re-productive system, or the sexes, we deem it due to chastity to give no descriptions in this work ; but, as a matter of duty, we shall be compelled to speak of its physiological laws and their violations in another place.

We will now proceed to consider each of the above mentioned systems and their

FUNCTIONS,

in order. The

OSSEOUS SYSTEM

need not be further described ; but some of its physiological phenomena demand our attention. The nerves of this system in a healthy state, are not sensible, but when a bone is broken, and begins to knit their sensibility becomes extremely acute, as manifested by the increased pain of which, is highly necessary to prevent a displacement of the parts. Thus we see that *pain* attends an effort of nature and is a *friend*.

If madder be fed to animals a few days, their bones become dyed red with its coloring matter ; and if it be omitted, the coloring in a short time disappears. Thus we see there is a constant change taking place—a constant *waste* and *supply* of parts ; and being found to exist in this, one of the most unchangeable of the tissues, the reader will be prepared to appreciate its importance in the others.

The bones in the infantile state are principally composed of cartilage, which are gradually ossified.

In this stage of the human body, it is very liable to become misshaped, and the constitution injured for life. The nurse *must not* swathe an infant chest as if she were girding a saddle upon a horse.

The extremities of the ribs always remain cartilage ; for

this reason, young ladies, by tight lacing, are enabled to put themselves into such *unpromising* shapes.

The joints of the spine are separated by cartilage ; a stooping posture, or weakness of the muscles of the back, by tight lacing, &c., will cause the layers of cartilage to become wedged shaped, and make the spine crooked.— This may be easily corrected by an effort to maintain an erect position.

In beautiful relation to the developement of bones, it is found that the first milk of the mother contains the greatest amount of phosphate of lime. As rickets are a defect in ossification, so the fresh milk of the cow or another nurse, may perhaps, be the most natural remedy.— The

MUSCULAR SYSTEM.

constitutes the lean or fleshy part of the body ; and excepting the contractility of the cellular tissue, serve to produce all its motions. The muscles of animal life are found principally upon the limbs and surface, and are subject to the will. The muscles of organic life are found more internally, existing in the heart, chest and alimentary canal ; and are not subject to the will. Of the

NERVOUS SYSTEM,

those of animal life have their great centre in the brain. They are the medium of perceptive senses, and of the force of the will in producing all voluntary motions. The nerves of animal life, spring, many of them, from the spinal marrow which is connected with the brain, and are called cerebro spinal nerves.

The nerves of organic life are exhibited by *ganglions* or small roundish bodies of a greyish white color, partaking of the nature of brain ; which are extended in a series along each side of the spinal column, and connected by nervous filaments. These nerves have for their centre two large ganglions behind the stomach, connected by nervous filaments ; sometimes called the semi-lunar ganglions or great solar plexus. This centre is the seat of peculiar animal sensations, and has been often referred to as the heart.

The organic nerves preside over all the involuntary motions, as respiration, digestion and the growth of the

body ; and bind all the animal functions together in *one* bond of *sympathy* ; for which they are called the sympathetic nerves. These nerves are connected in many places with the nerves of animal life, especially with nerves which arise from the top of spinal marrow, which is found to be the great centre of animal consciousness.

Thus the sensibilities of the body are most effectually bound together in *ONE*. Hence man, in speaking of himself, uses a singular pronoun ; and for this purpose, the Englishman has chosen the simplest and straightest letter in the alphabet, "I." The

VASCULAR SYSTEM

has for its great object, the

Circulation of the Blood.

The centre and principal motive force of the circulation is the *heart*. This is a hollow and a strongly muscular organ ; and is divided into four cavities. The two principal ones are called ventricles ; and are surrounded by strong walls. The two smaller ones are called auricles ; with less strong walls ; and are attached upon the principal part of the heart somewhat in the form of ears.

From the left ventricle of the heart arises, in a beautiful arch, a large vessel called the aorta ; from which arises all of the large arteries ; and these are divided, subdivided, and ramified into an infinite number of capillary vessels, composing an important part of all the tissues.

It is in this extreme part of the arteries that the blood performs its most vital offices to the system ; and by which it acquires a purple color, and is no longer fit for use.

It then returns by the fine radicles of the veins, which gradually coalesce until they unite in two large vessels, called the venacava. These, bringing the blood from the superior and inferior extremities, empty it in the right auricle ; from this, it is sent into the right ventricle ; from which it is again sent out by the pulmonary artery and ramified into another capillary system upon the air cells of the lungs.

It is in this part of the system that the blood receives its

most important vital changes upon itself; by which it acquires a bright scarlet hue; and is again rendered fit to replenish the system.

The capillaries of the lungs then coalesce into the four pulmonary veins, which return the blood to the left auricle of the heart; from the left auricle it is sent into the left ventricle; from which it is again distributed, as before described, to all parts of system.

Both auricles contract at one time; at which time the ventricles both simultaneously expand; and thus the blood is carried by a double force into the ventricles.

In the passage between the auricles and ventricles are placed floating valves, attached below by tendinous cords to the walls of the ventricles. These freely admit the blood from the auricles; but when the ventricles are filled with blood they rise up, and governed by the extent of the tendinous cords, exactly fill the passage.

When the ventricles in turn contract, the blood, not being able to flow backward, must pass, in one case, out of the aorta, and in the other, out of the pulmonary artery. At the mouth of each of these vessels are also valves, which, when the ventricles again expand, prevent the blood from returning into them. Thus it is kept in its onward course, night and day, in ceaseless circulations; every one of which is accomplished in about *three minutes*.

The wonderful harmony in the operation of this *dissimilar* machinery does not indicate *contingent consequences*, only, but the *arbitrary design* of matchless ingenuity; than which nothing can convey in stronger terms to our *faith* or *understanding*, the *wisdom* and *goodness* of an ALMIGHTY CREATOR.

THE PULMONARY SYSTEM

is principally designed for respiration; the chief organs of which are the *lungs*. These receive the air by way of the trachea, which is divided into branches called *bronchia*; these again, are divided into an immense number of branches terminating in little cavities called *air cells*. The lungs together with the heart, occupy the upper cavity of the trunk called the *chest*. This is separated from the *abdomen*,

in which are the stomach intestines, liver, &c, by a beautifully arched partition of muscles called the diaphragm.

This latter organ is the principal agent of motion in breathing. When its muscles contract it is drawn down from its arched, dome-like form, nearly to a plane; this enlarges the chest; and the lungs, which are very elastic, are obliged, by the pressure of the atmosphere, to follow its motions. The ribs and their muscles, also contribute very much to this operation. The ribs are attached to the spine by joints; from which the lower ones incline downward; and then terminate in cartilage, which incline upward and joins the breast bone. By this arrangement, when the muscles between the ribs contract the lower ribs are drawn upward, the front and lateral walls of the chest are thrown outward, and its capacity enlarged; at the same time the diaphragm being contracted, the lungs are inflated with air, which is called an *inspiration*. These muscles again relaxing, the muscles of the abdomen in turn contracting, drawing the ribs downward, and pressing the diaphragm upward, and the lungs at the same time collapsing by an inherent power of their own, the air is expelled, which is called an *expiration*. Thus we see that this most vital operation—respiration, is principally accomplished by those very organs, whose action *vulgar* and *ignorant* females endeavor to suppress by tight lacing.

“Yon naturalist or bard who worships grace,
May smile upon the sentimental face;
But sighs in love for that full swelling chest,
That upward bears emotion’s heaving breast.”

The size of the chest is a very good criterion of the physical force. When it is large, the person generally possesses a sanguine and active temperament.

This will not appear strange when we learn that *respiration is the only source of animal heat*; and that *the power of generating heat in the animal body is always in proportion to the living force*.

The vital agent of the atmosphere is oxygen, which constitutes only about a fourth part of it. Of this oxygen, a single pair of lungs consume 30 cubic inches in a minute; and leave in its place an equal volume of carbonic

acid, in which animal life becomes extinct as soon as it under water. Here we see the importance of pure air.—It is the oxygen which arterializes the blood and gives it its scarlet hue. It is this which gives to the inhabitant of the open air, his ruddy cheek and buoyant step. It is the deprivation of this, as one cause, which renders the inhabitants of our shops and cities pale and sickly.

WE MUST HAVE AIR, OR DIE. WE MUST HAVE PURE AIR OR BE SICK.

What wonder, if in violation of this law, there should be those, in our tight and crowded churches, in the afternoon, with lungs tied up to boot, that *faint*.

Would that this law could forbid that there be ever another human dwelling erected without a view to its ventilation.

Our senses seem to be less faithful sentinels against impure air than most other dangers. As animal, and culinary heat are the same, and abstractly, produced in the same manner, so fire, like breathing, will render the air unfit to support life; yet hundreds have breathed the fumes of burning charcoal, ignorant of their danger until death seized them.

To see a number of persons sleeping in a tight bed-room 8 feet by 8—to see them come out in the morning from an atmosphere that smells like Tophet, pale, languid, yawning, stretching, unrefreshed, and without an appetite for breakfast—to see a person sleeping where there is a furnace of burning coals—to find him in the morning in the same position in which he lay down—a corpse, are examples sufficient to warn us to call *reason* and *science* to our aid to preserve us from the “dangers which stand thick through all the land to push us to the tomb.” The

DIGESTIVE SYSTEM.

next demands our attention, the object of which is to prepare our food for the production of tissues, and of animal heat.

This is accomplished by the *Alimentary Canal* and its auxiliaries, the glands of the mouth, pancreas, and liver. The alimentary canal, commencing with the mouth, and terminating with the anus, is divided into the esophagus.

the stomach, the duodenum, the small, and the large intestines.

But, notwithstanding this apparently complicated division, the reader must not forget that it has a general *unity* and *sympathy*. Life has been sustained for years where there was no passage below the stomach ; that organ alone performing the offices of digestion, absorption, and excretion, which in the normal state are assigned to different parts of the canal.

Again, when the stomach could not receive food, life has been sustained sometime by nourishing enemas ; thus we see one part may vicariously perform the office of another. In some of the lowest order of animals, the alimentary canal is a mere sac with but one opening. In the higher grades it becomes a simple canal with two openings ; and in man is divided into four distinct parts, and is folded to six times his length.

These facts with regard to the great source of nourishment, present a fair type of the *unity* of the *whole* system ; and strongly condemn those physicians who govern their practice by specific operations upon individual parts.

The difference in the structure of the digestive system in the different animals, points to remarkable relation in their dietetic laws.

Those in whom the alimentary canal is more simple, can eat more constantly. We may take for common examples, the horse and the goose.

In those in whom this system is more complicated and the stomach is very large as in the ox, the animal, after taking its *meal* must stop, chew the cud, and digest it or bloat ; or on stopping, if it be driven to immediate labor it will famish. The reason of this is that digestion requires *vital* force, which, as we shall hereafter see, is a general *agent* whose production is limited ; consequently when it is required to digest the large meal in an ox's stomach, there is none to spare for labor, or if expended upon labor, there is not enough to expend upon digestion.

The capacity of the human stomach also ordains by this law, that MAN MUST EAT BY MEALS, AND NOT BY PIECE MEALS.

The alimentary canal is composed principally of two coats, or membranes, the internal or mucous, and the external or muscular coat, which is disposed in two layers of tissues, excepting in the stomach, where there are three, so arranged as to keep its contents in a revolving motion, by which they are mingled with the gastric juice, secreted by the mucous membrane, and converted into a soft pulpy mass called chyme. When the stomach is filled and this operation commences, both of its orifices are closed ; and Nature, while working in her secret laboratory, seems to proclaim, like the signs sometimes over mechanics' doors, "no admittance," "no piece meals."

Beaumont, who enjoyed the privilege of experimenting by an external opening, upon the operations of a living stomach, ascertained that the gastric juice unites with the food in *definite* proportions ; not in *all* proportions ; therefore, what is chymified is chymified indeed ; there is no half way about it ; consequently when there is too much food taken for this effect, it must remain as extraneous matter, irritating and debilitating the system. A law which proclaims, GLUTTONY IS FORBIDDEN.

In violation of these laws, many fond, but foolish mothers, overfeed, and grant their children piece meals (their judgement often misgiving them,) until they are rendered dyspeptics for life, or laid in a premature grave.

The peevish and unhealthy little mortal gets his piece to stop his crying ; and because he has not taken his regular meals ; while the very cause of this is that he has had piece meals.

However, infants and young children should have meals oftener than adults ; but they should be *regular*. Perhaps there are some grown up children who have not been weaned from piece meals ; but dame Nature knows when they are "out," and they will get chastised.

The digestive structure and habits of man point out a remarkable relation to his intellect. Thinking, like all other functions, requires *force*. Plants which assimilate ultimate elements cannot think ; their whole force is expended upon organic productions. These by much less force are converted into animal tissues. The ruminating animals, to which the Israelites, by divine direction, pri-

cipally confined their animal food, have a more complicated alimentary apparatus than man, and perform a greater digestive drudgery, assimilating the coarsest vegetable matter; accordingly those animals cannot reason. But man was designed to live upon seeds and flesh? which have organic elements nearest the composition of his own body, and require less vital force to digest them; thus leaving more to be expended upon mental actions; not only so, but to man is given the prerogative of economizing the digestive force by the use of *fire* in cookery.

It is the use of fire which not only distinguishes the power of reasoning in man from the lower animals, but its proportionable use distinguishes the degree of intellectual power between the different races and nations.

These facts should check the ardor of those dietetic physiologists who speak against animal diet and the arts of cookery; for their ultra notions may tend to reduce them to the idiotic, grass-eating state of Nebuchadnezzar in his degradation. Scotland and England are the most intelligent nations on earth. One is called the "land O'-Cakes, and the other the "Land of Roast Beef."

However, there are lamentable errors attending cookery—perversions alike common to all good. The drudgery of females in getting *three warm meals a day*, is one of the greatest examples of insidious slavery in the world.—How much valuable time it squanders, which might be devoted to intellectual pursuits, and the education of children; to say nothing about the gormandizing and sickness occasioned by *warm food*, and a *variety*.

We are sorry to extend our pages with these remarks, but we feel compelled to suggest some remedies for these evils. One day in the week is thought sufficient to devote to washing and keeping clean; and certainly another is sufficient for cookery. We pity the ingenuity of the housekeeper who cannot always have a supply of very palatable food, ready to be eaten cold; and without a great display of dishes.

Again, the systematic variety found upon our tables, is most wicked. A party sits down to dinner, and after making a decent meal of meat and potatoes, then comes bread and butter, when nearly satiated with this, then comes a

pudding, when the appetite fails upon this, then comes the cake, after cramming down some of this, the climax is crowned by a piece of pie. We have no objections against puddings, cakes, and pies, properly made and timely eaten.

The combination of flour and fruit in a pie is very congenial food. We do not mean those acrid things, poisoned with verdigris and lead glazing, which we find upon our tables. Combination of saccharine with flour in cake is also very excellent ; but the grease and alkali should be left out. Puddings, also, rightly prepared, are admirably calculated to save digestive force ; and these articles, when eaten alone will satiate with less quantity than most others.

Put together, then, these rules, ONE DISH AT A TIME, COLD FOOD, AND REGULARITY, and we have an effectual safeguard against over-eating.

We should observe that the digestive process commences in the mouth. The organs designed for this, the teeth and salivary glands, &c., are very specific. Beaumont found that fineness of fibre greatly contributed to digestion. This effect is designed to be accomplished in the mouth, and is called *mastication*.

Dr. Meredith Rees states that he has cured several dyspeptics by compelling them to sit an hour at their meals. These laws ordain that MAN SHOULD CHEW HIS FOOD, AND CHEW IT WELL,

The process in the stomach we have described, and is called *chymification*.

The next change takes place in the first portion of the intestine, called the duodenum. Here the chyme meets with the bile from the liver, and a peculiar fluid from the pancreas, by which a homogeneous fluid, called chyle, is separated ; and the process is called *chylicification*.

Whatever be the food we take, the chyle always bears the same character. In accordance with this, it has been found by Mulder, a German chemist, that when albumen, fibrin, and caseine (the basis of milk) our principal articles of food, are acted upon by potash, they all result in one general compound, called *proteine*. This element is considered by Liebig as the starting point of all the tissues.

Now, if we add potash in the form of *salæratum* to our cakes, we shall perhaps anticipate digestion by producing an impure proteine.

We have seen that the food, in the order of nature, must go through regular stages; and that the office of absorbing chyle belongs to the intestines, but may be transferred to the stomach; the artificial chyle of the rich cakes may thus pass out through the stomach, and of course will produce imperfect tissues.

An example of this may be seen in cows fed on still slops. With them the food must go through even more processes than in man before it is fit for assimilation.—But the fermented still slops anticipating and subverting this order of nature, the animals soon become sickly, their teeth decay, and their milk is unfit for use.

What wonder, then, that our *high livers*, in committing these perversions, should suffer and die with gout, surfeit, apoplexy, &c.

We feel also bound to endeavor to throw some light upon the great question now pending between *animal* and *vegetable* diet.

Considering our own body a very good physiometer (for we speak upon nearly all medical principles in reference to our own observation) having taken a careful notice of the effect of all kinds of food upon our person, and having in youth used a vegetable diet for three years we are prepared to speak with some degree of experience upon this subject.

During the period referred to we were a decided dyspeptic; and vegetable food did not cure it. When we commenced animal food again there was an improvement of health; and from our experience we are inclined to think that a *fibrinous* animal diet is not an improper food for man; but we are still more positive that a *fatty* animal diet is injurious. While we except a *part* of animal diet, the experience of Graham rejects *all*. But we believe the experience of many different *individuals* are not sufficient; nothing but different *generations* can settle the question by *experience*; we shall therefore appeal to a very different authority from Graham's or our own experience upon the subject.

The Bible is acknowledged to be a superior code of *morals*, and we find that wherever its language is connected with *physics* it is remarkably true to physical law.

According to its history man was originally a frugiferous animal; the "*seed*" and "*fruit*" of the "*herb*" and "*tree*" were to him for "*meat*."

But then it is said a change came over the history of his character; and from that time the destruction of animals became necessary to preserve his vitality—he was clothed in "*coats of skins*"; and analogy does not indicate that man should return again to his original diet till earth has returned again to Eden.

To Noah, was made an especial grant of animal food; and when *law* was more particularly defined to the Israelites there was a distinction for food, between *clean* and *unclean* animals; founded on certain natural characters. To what are these characters related? Let us see. Beaumont, in his experiments on the stomach of St. Martin, found that the bile in the normal state, only entered the duodenum: but that when oily food is taken, the bile is obliged to ascend into the stomach to assist in chymification. Oil and fat are found to be extremely difficult of digestion; and call for a vital force, inconsistent with its expenditure upon intellect. The esquimaux who use such quantities of train oil, approach the character of brutes.

In accordance with these facts we find that the clean animals are of the muscular, lean class, as the ox and sheep; while many of the unclean animals, are subject to large accumulations of fat, as the hog, bear, and camel.

Again there was a distinction between the *parts* of clean animals. And what is it? The same rejection of fat. In all the directions for sacrifices "*the fat of the kidneys*," "*caul*" &c., was not to be eaten by the priests, but burned upon the altar; to which was added this general law.

"It shall be a perpetual statute for your generations, throughout all your dwellings, that ye eat neither fat nor blood."

When we consider with these things, the common experience, that fibrin and albumen require the least digestive force for the greatest amount of nourishment; and that oily food produces dulness and disease, it is a demonstration that

ANIMAL FLESH IS A CONGENIAL DIET ; AND ANIMAL FAT IS NOT. [Perhaps the words "clean" and "unclean" indicate other characters of relation and non-relation which should confine us to the Mosaic distinction.]

If to these things we add the fact that the ox and sheep consume the "green herb," and that to the swine is fed the "seed" and "fruit," already food—a great violation of economy, it becomes not only a matter of physiological interest, but of civil polity, that swine eating be banished from community.

We come next to describe the structure and functions of the

ABSORBENT SYSTEM.

This, as we have before observed, is divided into two parts. First, the *lacteals*, a set of small vessels which arise in great numbers from the inner surface of the intestines, and absorbing the chyle, carry it through a set of glands, lymphatic, bordering this part of the alimentary canal, from which it is carried into an oval sac, near the bottom of the spine, termed the *receptaculum chyli* ; from this it ascends along the spine in a tube, called the *thoracic duct*, which empties into one of the large veins, and is conveyed directly to the heart.

The next class of absorbents are called *lymphatics* ; which arise in immense numbers from all the tissues of the body ; from which they absorb a fluid called *lymph* which is supposed to be expelled from the changing tissues ; but is still fit for the animal economy ; and is carried into the common channel with the chyle , and emptied into the blood. These fluids, in passing through the absorbents and their glands, assume the form of globules, and acquire the power of coagulation ; called *organization* ; besides possessing other characters analogous to the blood ; and are its immediate source.

From the heart the chyle is sent, along with the venous blood, directly to the lungs, where it undergoes another great change called *æration* ; and lastly, while passing through the arterial capillaries it accomplishes the final object of organization, the production of a tissue called *nutrition*.

We have now arrived at a point where we may begin to look into some of the most ultimate and vital functions of life—the *transmutation of the organism*—the change of blood into tissues, and the change of tissues again into lymph and waste matter ; and the production of *animal heat*.

We have mentioned the relation of the organic elements to these changes, to which we will recur.

The blood when drawn, spontaneously separates into two parts—a fluid which rises to the top, composed of albumen ; and is coagulated by heat ; and a thicker part which coagulates of itself, composed of fibrin, phosphate of lime, and a compound of iron in the form of red globules.

The albumen exists in the greatest quantity and corresponds in quality, with the nerves. This part of the system, probably undergoes the most rapid transmutation, and requires the greatest and most easy supply : hence the facility with which mental habits are changed ; hence the cause of the fact asserted by phrenologists, that the brain is capable of greater enlargement than any other organ after adult age, hence the greater necessity of sleep, for renovation, to animals who have a larger brain.

The fibrin is the next substance in quantity, and is identical in quality with the muscles.

These, being necessary to motion, undergo the next greatest change.

The phosphate of lime is the next substance in quantity. This is necessary to the bones ; and in accordance we find that they undergo a less rapid change than the other tissues.

Gelatin, the substance composing the cellular tissue, that great frame-work of the body, is never found in the blood ; but it is produced from the elements of the blood by the addition of oxygen, &c.—a radical chemical change which requires a considerable degree of force ; accordingly, and as it should be, this tissue changes the least of all others ; hence the difficulty with which strained and lacerated ligaments are found to heal ; hence, when the muscles are shrunk by starvation, the tendons, &c., preserve

their original size. It is a remarkable fact stated by Liebig, that gelatin will not support life. Animals fed upon it, died at length with the appearances of starvation.

It is a corresponding fact that gelatin cannot be converted into proteine; as is the case with albumen and fibrin.

Caseine, also, the basis of milk, and the only food directly prepared by nature, is converted into proteine; these three substances contain exactly the same proportion of ultimate elements; and their difference in nature depends merely upon a different arrangement of particles.— We should here remark that one of the principal differences between the vegetable and animal kingdom, is, that vegetables possess but little nitrogen, while it is a characteristic element of animals. But the seeds of many plants contain nitrogenized compounds in form of albumen, fibrin and caseine; exactly the same as these elements produced by the animal body.

These substances, or rather this general substance in its different forms is the only supply of the animal tissues, and is only produced in the Vegetable Kingdom. We should suppose, from this, that those animals which live upon herbs and grass, which have less of these substances, must eat a greater amount, and have a slower metamorphosis of tissues; and such is the fact.

The non-nitrogenized articles, on the other hand, such as starch, sugar, gum, mucilage, and fat, are incapable of supporting life only in a relative sense; i. e. by supporting the respiration, and production of animal heat which otherwise must be supplied from the vital tissues; as we shall hereafter see.

For this we have the authority of Liebig. Majendie, also, affirms that a dog fed exclusively on sugar, died in thirty-two days. And an ass fed on rice, lost his appetite, and died in fifteen days. These things should convince physicians of the utmost folly of attempting to sustain patients, for a length of time, upon a diet of starch, gum, &c.

Graham, the great leader of the dietetic school, seemingly aware of the apparent necessity of nitrogenized food, has labored hard to show that vital powers of plants can *transmute* the ultimate elements from one to another. It

is true that they *assimilate* these elements. But Graham has assumed, that "Earth's alkalies, acids, metals, sulphur, phosphorus, and other equally simple substances, may be elaborated by the vital power of the vegetable economy, from oxygen, nitrogen,* hydrogen, and carbon of the atmosphere."

A proposition without a shadow of proof. Not only so, but he says, "The vital economy of the animal system is not less wonderful in its analytic and synthetic powers.

* * * The blood of man always contains a considerable quantity of iron, which it would be difficult, if not impossible to account for in any other satisfactory way." This is the climax of hypothesis, and absurdity. A school boy in chemistry should know that the iron is obtained from the food.

But instead of animals *transmuting* the ultimate elements, they do not even *assimilate* them.

We have shown that the great vital force necessary in digesting herbs and grass is incompatible with *intellect*. The force with which carbonic acid is decomposed by the chemical action of the sun's light in vegetables, is equal to a red heat ; but animals cannot sustain such a heat ; consequently to decompose carbonic acid, they must have light ; and to be daily exposed to the light, they must have a stationary position ; therefore, the assimilation of ultimate elements is not only incompatible with *intellect*, but with *motion*.

But perhaps these definite relations of plants to ultimate, and of animals to organic elements signify nothing but the *ignorance* of the CREATOR, in contradistinction to the *wisdom* of MAN.

We hope our puny pen may never detract aught from the immense good done by this excellent man, Graham ; especially in another branch of physiology. We merely wish to strongly mark the dividing line between the two classes of food ; and check that unwarranted hypothesis which may lead people to sap the foundations of their health by attempting to live upon a non-nitrogenized diet.

* See Lectures on the science of Life.—Vol. 1. p. 41.

The red globules of the blood, which we have mentioned, are related to the production of animal heat ; which by the way, is the same as other heat ; and is produced in the body in a manner very analogous to that in a common fire.

All fluids owe their peculiar property to caloric or heat, and the gases ; for instance oxygen of the atmosphere, contain immense quantities of it in a combined state.—Carbon, the principal element of fuel, when in the gaseous form, has a greater affinity for oxygen, than oxygen has for heat. Whenever carbon is rarified by heat it attracts the oxygen which enters it without enlarging its bulk ; therefore the oxygen is obliged to give up its whole volume of caloric, and fire is the consequence.

Iron, also, has a great affinity for oxygen ; and in the globules of the blood it combines with it in such excess as to give it up very readily.

Carbon is the largest element in the blood. The globules become charged with oxygen in the lungs ; and passing rapidly through the arteries, give it up to the carbon ; thus producing heat in every part of the body, as required.

It is well known that when a furnace of burning coals is placed in a room, it consumes the oxygen, and leaves in its place carbonic acid. It is well known that when we inhale the breath we imbibe oxygen ; and when we exhale it, we give out in its stead carbonic acid. There is no difference in these two kinds of fire, excepting that the latter does not evolve light ; but even here we must remember that the arterial blood in its combustion becomes a bright scarlet ; which in producing carbonic acid gradually converts it into the dark purple of the venous blood.

The carbon of our food furnishes the most direct supply of fuel to the fire of life ; consequently a starving man is soon frozen.

For this reason, animals in winter must consume a greater amount of food. This difference is not so remarkable in man, because he equalizes it with his fires and clothing in winter, and an increase of exercise in summer.

But here an objection may arise. If food is simply a

direct source of animal heat, how can a person live a number of days, and preserve his heat without it?

The organs for the beautiful provision against this defect we have already described—the lymphatic part of the absorbent system; these carrying away the product of the changing tissues, convey it to the blood, where it supports respiration; thus the supply of fuel is equalized; and the production of heat may be continued many days without a new supply of food; but the body is famishing, and all the substances, and powers of life are approaching dissolution; yet, many physicians will keep their patients in this condition a long time, while they are attempting to destroy the disease.

Fat and oil are the most highly carbonized animal substances, and therefore well calculated to support animal combustion. For this reason animals which sleep during the winter, or do not get their usual supply of food, as the hog, have an accumulation of fat during the summer. The camel not only has a vessel in which to carry a supply of water, but an accumulation of fat, in the form of a burden; so that this “ship of the desert” has both a supply of water and fuel to support him in crossing the barren wastes.

We cannot avoid turning aside here, to trace still further these beautiful designs of the Creator. Fat is a slow conductor of heat, and in the hog, which inhabits a cold climate, it is spread over his surface; and while it supports, it also preserves his heat. The same is seen in the whale. Such a disposition of fat in the camel would be intolerable while traveling over the burning sands.

The reader will perceive from these provisions for uniformity of heat, that it must be of the most vital consequence to the animal. It seems that *heat* is as necessary a condition to the animal as *light* is to the plant. The tissues are held in combination by the vital force as the medium of affinity between their particles. The maximum of this force depends upon a temperature of about 98 degrees.

When this temperature is lowered, the decomposing force gains the ascendancy, and the metamorphosis increases; this increases the supply of combustible matter, and of heat,

which in return preserves the tissues, and resists the cause of disturbance. Hence, as one cause, a sudden chill is followed by a sudden reaction of heat. The graminivorous animals whose food contains but little direct support to their tissues, and who cannot admit of a rapid Metamorphosis, have this difficulty admirably compensated by the increased amount of carbon in their food, which produces an abundance of heat, and preserves the tissues from a necessity of change. The amount of force is manifested in proportion to the amount of change.—Hence the *smaller carnivorous* tiger is master of the *huge graminivorous* elephant.

But the purely carnivorous animals also sustain a disadvantage.

According to Liebig, “15 lbs. of flesh contain no more carbon than 4 lbs. of starch, and while a savage with one animal, and an equal weight of starch could maintain life and health for a certain number of days, he would be compelled, if confined to flesh, in order to procure carbon necessary for respiration during the same time, to consume five such animals.” This, philosophy, as well as common experience, indicates, that MAN SHOULD HAVE A MIXED DIET.

With this food, and the peculiar structure of man we obtain the conditions for the greatest conjoint amount of nervous and muscular change with the least expense of force ; therefore man has “dominion over the fish of the sea, the fowls of the air, and the beasts of the earth.”

The intelligent reader will perceive that although we may have proved the *consistency* of a *select* animal diet, yet, we have not proved its *necessity*. Our main object is, while we explain physiology, to make known the important difference between azotized and non-azotized food. The following is a list :

Azotized, or
Supporters of Nutrition.

Albumen,

Fibrin,

Caseine,

Thein, (principle of tea and
Coffee.)

Non-azotized, or
Supporters of Respiration.

Fat,

Starch,

Gum,

Sugar—Alcohol.

The last mentioned article in the non-azotized class *alcohol*, is highly inflammable—passes through the absorbent system without change, and meeting with the oxygen of the blood produces a quick and rapid flame that seems to singe the very soul.—Or, to be more philosophical, by producing heat it preserves the muscular tissue from the necessity of change; so that the drunkard is enabled to go many days with but little food; but the brain and nerves of sense &c. excited, must waste, and their vitiated appetite calling only for alcohol, the damage is not discovered until it results in *delerium-tremens*. If the consumer of alcohol labors regularly the muscular tissue must also waste, and seeming to be more under the immediate control of the organic nerves, nutrition is demanded, and the whole is in a measure preserved. Delirium tremens might, possibly find a remedy in common tea; for the following reasons.

The last mentioned article in the azotized class, *Theine*, is one of the most highly nitrogenized vegetable elements known; and although it should be questioned as a proper supporter of nutrition, for it is not a compound of protein, and does not form blood like the other three of the class, yet Liebig has shown that its chemical character is closely allied to the brain, and takes an active part either in its formation or transmutation. And it is a fact of experience that tea and coffee are powerful stimulants of thought; and will enable a person to keep awake when he otherwise must sleep.

But it should be observed, that, although Liebig pronounces Theine not poisonous, yet there are a number of substances of this class, which not approaching so near the character of the brain, are deadly poison. Tea and coffee at best can only be regarded as medicines or extras; their daily use is preposterous; they disturb the balance of the general system; and their excessive use is a fruitful source of insanity. If, when people wish an especial exercise of thought, as on the sabbath, they would then, and then only use tea, it might be of some benefit; at least, in the instance given, we should have *no sleeping during sermons*.

We must now remark that the absorbent vessels are fur-

nished with numerous valves, which open only in one direction, and seem to be especially related to

EXERCISE.

These valves are so formed that the fluids can pass in only one direction.

When the muscles are in action there are repeated impressions made upon these vessels which oblige their contents to move ; and governed by the construction of the valves, they must in all cases move toward the heart.—The same disposition of valves are found in the veins, and it is an ascertained fact that the motions of the blood in the vena cava correspond with the motions of the chest. The movement of the chest also contributes essentially to the peristaltic motion of the bowels, by which their contents are moved ; hence people of sedentary habits are subject to costiveness. *It is a law of Nature that the natural exercise of an organ increases its growth ; and more especially the nervous and muscular matter.*

Exercise is attended with a waste, but it, in return, generates an active vital force which is capable of restoring the waste with *usury*, providing the exercise be attended with suitable periods of rest. If, in violation of this rule, one does not exercise at all, he will not be “half a man ;” or if he over exercise, he may be “half dead.”

A feeble person should exercise but little at first, and increase it as his organs increase in power.

But in disregard to this law, sedentary people, to make amends for their neglect, will, in perfect keeping with their indiscretion, seize a gun or fishing rod, and after a fatiguing tour, return “overdone,” and complain that exercise makes them worse.

When we consider the effects of exercise, we discover a waste of substance, and therefore the action of the absorbents must be increased—that an increased supply of blood and heat must be produced—that the motion of the heart and lungs must be quickened—and that the bowels must be evacuated and the stomach supplied with food ; all of which takes place by a connection of natural consequences.

When we consider the vital force we find that it is a

general principle—alike the agent of muscular motion and of mind—we find that *the amount of force is in direct proportion to the amount of well organized tissues ; and therefore THE MORE VIGOROUS THE BODY, THE MORE VIGOROUS THE MIND.*

Liebig says, "All vital *activity* arises from the mutual action of the *oxygen* of the atmosphere and the elements of *food*." In other words, the condition and evidences of life, are *eating, breathing, and action.*

On this point the studious often mistake. Shutting themselves up amid their books, as if the mind were independent of its "mortal coil," they seem to think that if they reduce their diet, they fulfil all the requirements of Nature. Therefore the common language, "Students should eat lightly." Folly ! Just so laborers should eat lightly. If a full meal will detract the vital force from the power of *thought*, so it will from the vigor of *labor* ; and if a full meal will indirectly increase the vigor of labor, so it will the power of thought. No wonder that so many of the famishing students in colleges become drivellers, incapable of benefitting mankind. No wonder that the world has been obliged to look to the harvest field and mechanic shop for most of its "mighty minds."

From these considerations we derive this rule. WE SHOULD NEVER BRING DOWN OUR DIET TO CORRESPOND WITH EXERCISE, BUT ALWAYS BRING UP OUR EXERCISE TO CORRESPOND WITH A NATURAL DIET. To which we will add the cautionary ophorism of Abertheny, "Remember it is the quantity *digested*, and not the quantity *eaten*, which supports the body." 'Fasting and full eating' was a rule of Bacon; and it corresponds with the dietetic structure of man—with the book of *nature* and *revelation* on the subject. Our next object is to consider the

EXCRETORY SYSTEM.

It is remarkable that these, although destined to throw out waste matter, at the same time perform a regulating effect upon the general system.

The kidneys—perhaps the least important—are designed to relieve the body from certain salts and oxidized products, as well as any surplus of liquid which it may re-

ceive, and which could not consistently pass out through the skin.

The action of the skin is designed to vary with the temperature of the air; and the action of the kidneys with the quantity of liquid.

There is an intimate relation between these two organs. When the action of the skin is suddenly checked, an increased duty is thrown upon the kidneys; and if not attended to, may sometimes result in diabetes. These organs vary in their structure, in the different races of animals, more than the other excretory systems; and probably are the least and last to which the physician should direct his specifics.

The next is the liver, which receives a large quantity of venous blood and secretes from it the bile, an agent as we have seen in digestion; besides regulating the peristaltic motion of the bowels. Thomson calls it the natural physic of the body; and it is a fact when the biliary duct has been tied in animals it resulted in constipation.

Liebig states that the bile consists largely of unoxidized carbon which is absorbed again by the bowels, and consumed for the production of *heat*. Many people seem not content with their health without taking occasional doses of Brandeth's pills or the like to "carry off the bile and cleanse the blood;" when in fact a bilious discharge is an evidence that the lacteals of the bowels are closed; and the order of nature subverted. We have seen some who have "purified their blood" in this way until they seemed about ready to fly away to the ethereal regions. People should know that a sudden check of perspiration, by lessening the action in the capillaries of the surface, will sometimes produce diarrhœa. This state of the bowels always detracts from the vigor of the arterial capillaries—nature's great finishing shop. What can produce more sudden and great prostration than the bilious discharges of the cholera morbus; and who shall presume to bring on such a state artificially. Moderate tightness of the bowels is concurrent with strength and health. If costiveness be morbid, cathartics only make a "bad matter worse."—Exercise, fasting and Graham bread are sure remedies.

The liver next to the kidneys is varied in different class-

es of animals ; and in many kinds the gall bladder is absent.

The next is the skin ; and of all the excreting organs, this is the most uniform in the animal kingdom, the most important in the functions, and the most to be regarded by physicians.

Sir Charles Bell, in speaking of it, says, "It is as important in its function, and the healthy action of the system depends upon it nearly as closely as the action of the lungs and the surface of the intestines."

In fact, the necessity of our taking food, and putting on clothing, points out by the finger of Nature, that the alimentary canal, and the skin, are the two great points, which, more than all others, demand the agency of man, both in sickness and in health.

The skin is principally composed of three layers, the cuticle, retemucosum, and the true skin. The first seems to be a mere protection—being produced by secretion—very easily restored—and without sense. This is the part raised by a blister ; and is found to be very elastic, and easily effected by different degrees of temperature and moisture.

The second, the retemucosum is very thin, and like the cuticle is composed of mucous, without nerves or blood vessels.

This membrane is the seat of coloring matter, which varies shade with the different races.

It is thicker as the color is darker ; and is very conspicuous in the negro. From some observations this membrane seems to be related to the absorption of miasmata, and poisons—being, when thicker, a greater safe-guard against them.

This seems not the less remarkable, since immediately below this is found a very fine vascular membrane which Bell regards as the seat of the small pox pustule, &c.—Flannel clothing has been used with supposed advantage against malaria and contagion ; and dresses of oiled silk have been used with success against the infection of the plague in the Lazaretto of Naples. It has also been observed that the oil dealers of Egypt were never affected with the plague.

If these things are correct, then we have discovered beautiful provisions in nature by which the darker complexioned people of hot climates are enabled to resist the malaria common to those countries ; and a useful clue by which to avoid its dangers in our own latitude.

We come next to the *cutis vera*, or true skin, lying below the other two layers. This is a thick dense, and elastic membrane, interspersed with nerves and blood vessels, amazingly fine and numerous ; and also studded with millions of little follicles, some of which secrete the hair, some a sebaceous oil to supple the skin ; and also, immense numbers of little glands, which, excrete the perspiration.

These perspiratory organs have outlets in the form of little tubes, which, seen under a high magnifying power, appear at first to take a serpentine course, and entering the cuticle, become closely spiral, and terminate in little openings, called pores. This spiral construction of the perspiratory ducts appears to be related to the changes of the temperature ; and when we understand that it is strictly necessary that the amount of perspiration be increased or lessened with the change of heat, and that the elasticity of the skin and cuticle, are sensibly effected by it, we readily understand the object and the operation of the spiral tubes.—By having an extended surface, they admit of a greater amount of contraction from cold, their capillary resistance is increased, their excretion diminished, and vice versa ; so that the perspiration is varied by the temperature more uniformly than could be done by any other means.

Thus we see that these singular perspiratory vessels are a simple but effectual system of safety valves.

From these outlets, it is estimated there are thrown off nearly two thirds of the waste matter of the system ;—hence one important cause why a continued check of perspiration proves so disastrous to health.

But this is not all, the vapor of the perspiration plays another very important part.

It is well known that water thrown upon a heated substance will become vaporized and carry the heat rapidly away ; and that oil which is not volatile, will not have the same effect. Liquids, vapor and gases, must combine with

heat in proportion to their rarity. That vapor should carry away heat from a substance until it is reduced to the temperature of the surrounding medium is not wonderful, but that it should continue to carry it away from the surface of a porous vessel until the liquid within, is in a hot day reduced to the level of ice water, certainly shows a most surprising property. This is a complete key to the physiology of perspiration.

When the pores are closed, heat must accumulate, and the body be in a state of fever ; and concurrent with this is a retention of waste matter, and a check to nutrition and digestion.

When the cutaneous system is very much relaxed, the body debilitated, and but little blood reaching the surface, the perspiration produces an icy coldness ; so great that even Thomson (for he too may err) thought that the moisture was condensed from the atmosphere, like that seen upon the surface of a pitcher of cold water in a hot day ; but this cannot be the case, for after death this appearance ceases ; and Thomson cannot consistently say that the body is more cold before death than after it. This state of the system is called a "cold sweat" or "death sweat ;" and certainly it is no desirable predicament in which to be placed, yet it is the very kind of sweat tending to be produced by physicians when they reduce their patients to destroy fever.

In an ordinary state of rest and health the cutaneous excretion is not manifest and is termed insensible perspiration. This is a definitely balance point, in which there is just heat enough to keep the surface sufficiently dry, and just moisture enough to keep it sufficiently cool. If we disturb this equilibrium on either hand—if we reduce or increase the vital actions, we shall have in one case a cold sweat, and in the other a warm one. This latter state is admirably calculated to balance the heat caused by increased temperature or exercise. Every one who has felt the oppressiveness of a warm day, when commencing labor with a dry skin, and again has felt the soothing relief on the breaking out of a sensible perspiration, must be convinced of its importance. The vapor carries away the superabundant heat.

It is this which enables the inhabitant of the torrid zone to endure the vertical sun, and yet his bodily temperature be no higher than that of the Greenlander.

It is this that has enabled people to remain sometime in an oven that would roast meat ; and Chabert, the fire king, entered an oven at 600 degrees ; nearly three times hotter than boiling water.

On the other hand it is the lessening of the perspiration, as one cause, that enables us to endure the cold. If we perspired as freely as the people at the equator, we should perish with cold in our own temperate latitude.

While, as we have seen, the body has the power of generating heat at the centre, it also has the power of generating cold at the surface. Thus, THE PERSPIRATION IS THE REGULATOR OF ANIMAL HEAT.

But we should remark that it is not altogether performed by the skin ; for the lungs have an exhalation very analogous to it ; and a translation of perspiration often takes place from the cutaneous to the pulmonary system, of which the nose, pharynx. (the back part of the mouth) and the trachea are a part ; hence the sneezing, hoarseness, and expectoration, consequent to a cold.

In carnivorous animals, who perspire but little, we find panting and lolling out the tongue, in hot weather substituted for a sensible cutaneous perspiration. This relation of the skin to the lungs,—in fact, its relation to every part of the body—is a key to a most important secret in preserving health. Here is written in the volume of nature, a grand condition of life ; and if man, as master of his condition, would *avoid* “taking cold,” that fruitful cause of so many diseases, or if unavoidably taken, would immediately counteract it with the vapor bath or other proper application of HEAT, he would be free from one quarter of the “ills to which flesh is heir.”

It will be readily seen that the excess of internal heat over that of the external, is an important object in the circulating power ; as this difference is effected by the perspiration, so we shall find that the *equality* of the circulation is effected by equality of the perspiration.

We have known a sudden check of perspiration in the feet by wading in snow, produce a sudden and violent de-

termination to the head. If a person partially exposes his body to a current of air from a door or window, he will be far more likely to take cold than if exposed to the open winds. Again, if a person wet his feet only, he will be in more danger than if he had wet his body all over, although in the later case he will lose much more heat than in the former. The reason of this is, *when the perspiration is checked equally, the balance of circulation is preserved, but when unequally, it is disturbed, and disease is the result.* But we must remember that checking the perspiration equally is not the same as checking it permanently.

A man was once confined under cold water several hours, excepting his head ; the result was an immediate fever ; and such is the case when a person is long exposed to chilly air.

It is an excellent rule, that if a cold bath is followed by a protracted chill, instead of a warm glow, it should not be used.

And now that we are on the subject of

BATHING,

the reader will readily imply its great importance. The whole surface of the body should be often, and thoroughly washed. Every house should have a room fitted up with vapor, warm and shower baths ; and ready for any emergency—for any one to bathe night or day, without the assistance of a second.

We would as soon think of building a house without a pantry, as without a bathing room. The pores of the skin must be kept open—the safety valves must be unobstructed, or the machinery of life is in danger.

It should be remembered that after a vapor bath, a light shower bath will contract, or tone the skin, preserve the heat, and prevent from taking cold. Or some stimulating wash, vinegar and water, salt water, or spirits, will have a similar effect, though used warm.

It is this stimulating effect of salt which makes people who are wet in sea water, so little liable to take cold.—When a child, or other person has wet their feet, an im-

mediate washing with stimulants will generally prevent any bad consequences.

The skin, too, is a great absorbent. Paracelsus asserts that it imbibes nutriment to such an extent that he has preserved the lives of patients by a bath of milk. Sailors when cast away at sea have effectually prevented thirst by keeping their clothes wet in sea water.

The skin absorbs much faster when in a state of perspiration than otherwise. This may seem rather contradictory; but it is a law of the exhaling membranes that when they exhale they also absorb. A chicken's intestine taken out when warm, filled with milk and thrown into water, will admit the milk to pass into the water, and at the same time a portion of the water passes into the intestine. In this respect there is a strong analogy between the skin and the intestines; and in fact so great is the identity of these two organs in the polypus that when this animal is turned wrong side out, it still lives, the skin performing the office of the intestine and the intestine performing the office of the skin.

In the serous membranes, which line the cavities of the body, absorption and exhalation balance each other.

When this balance is disturbed we have inflammation in one case and dropsy in the other. The intestines are designed to absorb much more than they exhale; and the skin to exhale much more than it absorbs. Cathartics and cholera subvert this order of things. In fact we suppose some of the brandrethenians might be made to absorb food externally and exhale it internally; thus equalling the polypus turned inside out.

The skin absorbs mercury and other poisons, producing all the effects as when taken internally; therefore it should never be exposed to deleterious substances; and perspirable matter should never be suffered to accumulate upon it. *Cleanliness is a law of Heaven and Earth.*

Intimately connected with the subject of perspiration is that of

CLOTHING.

This should be so regulated with the change of

weather as to avoid being chilled. Remember this rule and keep it as your lives---*never be chilled*. The wearing of flannel next the skin is justly applauded.—It excites it, absorbs perspiration, and keeps heat regular. Dr. Combe, the physiologist, thinks that by its use and other due attention to the surface he has saved himself from pulmonary consumption. No doubt ; such means might have saved thousands and tens of thousands. Flannel in our climate should be put on early in the cold season, and taken off late in the warm ; and if the cold weather returns, put it on again. Remember never be chilled.

Young ladies are often accused of wearing thin slippers and otherwise exposing their health in cold weather by improper dress. This was once true, but they are studying physiology ; they are learning better now. But gentlemen, old and young, abuse their feet with dress in a different way ; they draw on thick elastic stockings, and cram them into tight boots. This great confinement causes a moisture which reduces the temperature so much that we often hear the subject complaining of damp and cold feet, but unable to tell the cause. A sensible perspiration is incompatible with health in cold weather ; besides the feet should be freed of their waste matter ; and not only so, but have pure air ; for the shin imbibes a portion of oxygen. If no stockings are worn with boots, the feet will be much more warm and healthy.

And now we must never be afraid of whatever improvement our experience suggests. We must remember that our fathers have descended from barbarous nations. When we look upon the little feet of the Chinese women, the flat heads of the western indians, or the small waists of American ladies, we look alike upon the traits of heathenism ; and when we look upon a little child stretching forth its bare arms in a winter day, with its sleeves cut off at its shoulders, we behold a relic of barbarism.

In considering the various functions in the preceding pages, we have noticed two important

POWERS OF LIFE.

the vital force, and heat. These, although they actuate the various organs yet in turn are produced from them by a wonderful interchange, which keeps up a perpetual action. When we consider life, we discover nothing, direct, but a reciprocity of actions. We *labor* and *rest*. The chest *rises* and *falls*. The heart *contracts* and *expands*; all of which is subservient to the chemical changes—the *composition* and *decomposition* of the tissues; from which results the vital force—passing from a state of affinity in the tissues, to a state of activity in the nerves—the agent of thought, motion and growth or recombination of tissue; and concurrent with this, is produced heat, which is not only an agent of motion in the fluids, but a condition of action to the vital force.

By these powers of life we do not mean that conscious, self determining principle, which through the medium of *action*, takes cognizance of *matter*; and which all mankind have been compelled to consider in contradistinction to *matter*; and have denominated *mind*.

The production of the vital force has been compared by Liebig to the production of electricity from the galvanic battery.

When a series of plates, of copper and zinc, are exposed to an acid, and their ends brought into connection by means of wires, a rapid revolution of electricity takes place; accompanied with an oxidation of the metals. But when the connection is broken, both effects cease. So in the animal system, when an action conveys away vital force, a metamorphosis of tissue takes place; but unlike the galvanic battery it is restored during rest. This vital force holds the tissues in affinity and resists the action of oxygen.

In a state of health and temperance it accumulates, or in the words of Liebig, it acquires a momentum, which, when expended upon action, determines a corresponding waste of substance.

But the fact of there being a momentum of force, enables temperate actions, attended with proper nutriment, to repay the force expended in them with gain—with an in-

crease of mass as seen in a blacksmith's arm, or the well proportioned muscles of the farmer. Deficient exercise allows of no gain, and excessive exercise, either of motions or passions, expends the capital itself. How important then, that we wisely husband this precious principle of life.

The vital force which is so analogous to electricity, has been considered by some as being identical with it; and although it must be a vital principle ulterior to heat, yet how can it compare with heat as a practical agent in the hands of man.

It is true that it has been applied as a semi-tangible agent, with wonderful effects, under the cognomen of *animal magnetism*; and is well worthy of investigation; especially in its application to surgery, where it enables patients to undergo operations without any pain, like Adam in his deep sleep.

But its existence was long unknown, its physical nature is still obscure; and the conditions of its application often cannot be obtained; therefore it cannot be regarded as the most universal agent in causing disease.

Not so with heat; this is intuitively known to all.—The fly basks in the sun; the hen gathers her chickens beneath her wings to keep them warm; and man for the same purpose kindles the glowing fire. Heat, in one sense, seems to be more subtle than all other imponderable agents. The *light* of the sun may be turned aside, or shut out from us, the *electricity* of the thunder cloud may be "bottled up," but *heat* is the most powerful and unconfined of all known things. When collected it radiates itself in every direction, until the equilibrium is restored; and no human means can prevent it. As *spirit* seems to be the universal medium of ideas, so *heat* seems to be the universal medium of matter, the solidity of the diamond, and the fluidity of ether depend upon it; and vital force and electricity are alike subject to it.

According to Liebig, "The phenomena of vitality in the living organism diminish in intensity when heat is abstracted, provided the lost heat be not restored by oth-

er causes." "The weaker resistance of the tissues is determined by the abstraction of heat, or by the expenditure, in mechanical motions of the available force of the living parts."

The operation of heat will be better understood when we perceive its anatomical relations. The heart is situated in the centre of the body, and the main arteries course along the centre of the trunk, and on the inside of the limbs next to the bone. The blood in the arteries is one degree higher than in the veins, and several degrees higher than the surface of the body. Thus we see there must be a constant radiation of heat from the centre of the body and limbs to the surface; no doubt an important cause of motion in the circulating fluids. Who that learns this will not admire the sagacity of Thomson in saying that the internal heat should be kept above the external—the fountain above the steam, and the current of life will flow with healthful vigor; which we have seen is measurably reversed in case of fever.

Every one who has learned that the expansive power of a certain degree of heat is necessary to the chemical combinations in the body; and that a reduction of heat reduces the vital force—its power of holding the maximum of tissue in combination, just as cooling the air reduces its capacity of holding water; and that the production of heat by the body always has a life preserving tendency; and that there is no vital agent that can so directly and universally applied by man, must at once concur with Thomson in believing that to our agency at least, "HEAT IS THE PRINCIPAL CAUSE OF LIFE AND MOTION." No element whatever is so strictly a CONDITION of ACTION. All chemical changes depend on it. All animated nature requires it. In contemplating these things, well might Thomson exclaim

"Look at the earth in winter-time,
Fields, trees, plants, flowers decayed,
Then view again when *spring* returns
Them rising from the dead.

When we consider the actions of living bodies we find

that as belonging to finite beings they cannot be continued infinitely in one direction, or in other words every *action* must have a corresponding *reaction*; and agreeing with this, the moving powers have opposite states, *positive* and *negative*, *heat* and *cold*. Perhaps the different actions of the *functions* have none more important than the *expansion* and *contraction* of the vascular system. Although apparently opposed yet they are strictly subservient to, and consequent upon each other. The greater the contractile power of the arteries the greater will be the expansile power or momentum of the blood, and vice versa.

If a debilitated person stoop some time, the vessels of the head are distended with blood, when he rises the pressure is relieved, but the weakened vessels do not contract to embrace the diminished quantity of blood, the circulating force toward the head is lessened and dimness of sight or fainting ensues. The relaxation of the vessels, by allowing a reflux of blood upon the heart, is the cause of palpitation

We have often explained this law to our patients—pupils, by the example of a river. Where the channel is wide it flows sluggishly, but where it is narrow the waters rush on with rapidity. We have a proof of this in the following proposition of hydrodynamics. “*When a liquid flows in a tube which fills it every where completely, the quantity of this liquid which traverses the different sections of the tube in a given time ought to be every where the same; consequently when the tube increases the velocity diminishes; and when the tube diminishes the velocity increases.*”

This general law of expansion and contraction in the body has a striking correspondence in the Solar System. The attraction or gravitating power of the Sun agrees with the contractile power of the heart and arteries; and the tangent or projectile force of the planets agrees with the momentum of the blood. When a planet approaches the sun, the gravitating force increases, and its rapidity results in a greater tangent force which carries it again from the sun, and thus its revolutions are perpetuated. So it is in the human system; the

more vigorously the heat and arteries contract, the more rapidly the blood circulates, the more food is digested, the more the vessels are expanded; and, in turn, the more vigorous becomes the contractile power.

If the gravitating force of the Sun were destroyed the Solar System would fall to ruin; and so in our systems when the tissues are weakened, the blood recedes upon the heart, and lassitude, faintness, or palpitation ensues; and when contractility is destroyed dissolution takes place.—The more immediately these forces effect each other, or the more nearly they are balanced in the planets the more nearly circular will be their orbits; and the more congenial to life their climates.

A like balance constitutes health in the human system. This balance is destroyed in the intermitting fevers; and then the action of the system corresponds more nearly to that of a comet.

In the ague and fever, for instance, the paroxysm commences with a recession of blood from the extremities, followed with chills, on account of weakness in the vessels; after a time a reaction takes place, the blood is thrown to the surface, and fever ensues on account of the now abnormal contractility of the vessels.

By keeping these illustrations in view it is very easy to understand how peruvian bark and other tonics have such a wonderful effect upon ague and fever.

These medicines impart power especially to the circulating system; and given just before the time of a paroxysm, they increase the contractility of the vessels to such an extent that the blood is kept to the surface, and the paroxysm cannot occur.

The reader will also perceive that it is upon this principle that the shower bath produces its benefits; but it must be remembered that the application of cold to the surface is but a negative principle, and must always be regulated by the positive power of the system or a supply of heat to react against it.

All applications to the body depending on reaction are extremely limited in their good; and very liable to overbalance the powers of life; in fact none but application of

cold to the surface should ever be attempted, and this requires much discretion.

In a normal state the *positive* powers in nature always produce their own requisite *negative*. We have seen that the *heat* of fever tends to produce *cold* on the surface by inducing perspiration.

We have seen that in the Solar System there is but one course of orbital motion, and that this cause excites a necessary opposing effect.

So when we consider life in the aggregate we find that it must be assigned to one general principle, which is best expressed by the word *action*.

Thus we see again, that LIFE IS A UNIT; and moreover that WE MUST NEVER EFFECT VITALITY, NEGATIVELY, WHEN WE CAN POSITIVELY.

We have now arrived at a point where we may look upon all the organs of the human body united together in beautiful harmony; with their reciprocating forces resulting in the majestic powers of motion, and still sublimer powers of thought—a system “fearfully and wonderfully made”—fearfully, because it depends upon certain conditions which if not observed, death is the result—wonderfully, not only in its matchless structure, but in its physiology—we behold there a system of functions so mutually dependant that it seems impossible to tell which is antecedent—the heart depends upon the lungs for ærated blood, and the lungs depend upon the heart for their own supply of the same—the digestive system depends upon the vascular for its secretions, and the vascular system depends, in turn, upon the digestive for its nutriment—without blood the nerves will not act, and without nerves the blood will not move—when vital force is diminished, the tissues *waste*, and the wasting of the tissues again make an available force, applicable to *supply*.

Thus far we have traced functions so related that it is impossible to know which is the cause, or which the *effect*—in fact the terms are mutually applicable—they constitute a circular chain of circles without beginning or end—when one is weakened its neighbor is weakened—the principal circle represents the vital force—when this is weakened so are the smaller circles—the subservient functions,

or when they are weakened, so is the vital force. But within all these we behold another agent upon which the vital force itself depends, and whose functions are diverse from the rest; for when the vital force is weakened this is strengthened; as in fevers;—this is *heat*. Thomson calls it *life*. We will venture, at least to say, HEAT IS THE UNIVERSAL HINGE ON WHICH CREATION'S CIRCLE TURNS.

Hitherto we have treated only of the immediate interests of the individual; but besides these, Nature has established another interest in the propogation of the species, to which especial organs are appropriated, called the

REPRODUCTIVE SYSTEM.

This system is divided between the two sexes; and is governed by laws as important to each, as all the other laws of life united; and not only so but they are of the utmost importance to their progeny; for these must be but the antitype of the condition of the reproductive powers, which in turn are but the antitype of the condition of all the other powers.

Related to these organs, are especial faculties of mind which are among the strongest and most important passions of man.

According to the moral rule, the greater the good of any blessing, the greater the curse of its perversion, so we find these faculties are, alike, the element of some of the finest pleasures of social life, and the worst maladies of body, and keenest miseries of mind.

The mutual action between these physical organs and mental faculties is not fully developed until about the fourteenth year in temperate latitudes.

The preturnatural excitement of the amative faculty before the physical developement of the corresponding organs, is thought to be one of its most mischievous perversions. It is an established law in physiology, that *the more prematurely an organ is brought into action the weaker it will be, and the sooner its decay*. To prevent evil consequences of this nature to the young, is the province of the parent and guardian.

And they may find ample preventive means, by proper precept and example in that delicate moral feeling, *chastity*,

by virtue of which we hope many of our readers will blush to see us compelled to write upon this subject.

By the age of puberty the principles of chastity should be fixed ; and from that time there needs no longer negative but positive action on the subject—knowledge must be communicated.

Like savage and ante-christian times shall this eden of the soul be abandoned to the serpent, and left to the growth of all that is wild and noxious, or shall the serpent's head be bruised, and the garden be cultivated—this faculty of mind be included in the province of education ?

This period of life is the most important promontary in the voyage of time, and if safely doubled, the rest of the voyage is comparatively secure. It is a period when the young are introduced to all their relations, to society ; and the seven years, from, the fourteenth to the twenty first, is none to long an apprenticeship for a wise preparation to fulfil them.

An excessive indulgence of the procreating powers, is, at any time of life, a serious error ; but it is in early life, ere the body has ceased to grow, and the tissues are consolidated, that its damages are sustained from which there is the least hope of recovery.

So necessary are the sexual organs to all beings possessing vital force, that we may trace them down to the lowest grade of plants—the stamens and pistils constituting the male and female organs. It is in plants and flowers that we may read, in chastest lines, man's own procreating laws. The life of a plant, in itself considered, seems wholly directed to the perfection of the seed—the propagation of the species.

But in the brutes there is superadded to this a consciousness of present existence. And in man it is left far behind by both the sense of present existence and the anticipation of immortal life.

When man degrades his noble powers to undue amours, he sinks himself towards the brutes—yes, towards the level of a mere vegetating existence.

The roots of biennial plants may be tumbled into a cellar or hung up and dried, yet planted on the ensuing spring, they grow again vigorously ; but when they have pro-

duced their seed, they die—flowering seems to exhaust their vitality, and no human means can resuscitate them. The same law appears under different circumstances in perennial plants. When trees are caused to bloom early, their growth is stunted; and gardeners are in the habit of plucking the flowering buds from their rose bushes &c., in order to increase their size.

What can we expect, then, from the constitutions of youth whose vitality are severely taxed by sexual indulgence. It must be remembered that the vital force is a general principle, and when a large amount is expended upon any one object there is but little available for another. It is manifest that there is no product of the human body that exhausts so much force as the elements of generation. For this reason the ancient Greeks called it the third digestion.

The intelligent youth must here be reminded that the increase of brain by exercise is one of the most certain of the late physiological discoveries, but that the developement of intellect cannot be thus effected without a momentum of vital force on hand. An example of this principle occurred in the illustrious Herschel, who commenced the study of astronomy after forty years of age, from which time his head increased considerably in size; and it will appear still more encouraging to the reader when told that temperance and chastity brought an important tribute to this increasement of intellect. In fact, occupation of the mind upon any noble object, naturally tends to these virtues; while on the other hand, we find the drunkard and the libertine generally indolent.

It is a remarkable fact that many plants taken from their native situations and cultivated in an unnaturally rich soil, will have their stamens become petals and thus be rendered incapable of producing seed. A precisely similar effect appears in the populating habits of those fashionable hot beds of society where indolence and luxury abound.

Now it will not be denied that there is a solitary self-indulgence practiced among youth, which if not more immoral, is even physically worse than the social vice. It saps the very foundations of life; and is the predisposing

cause of many diseases, such as tuberculous consumption, scrofula, cutaneous eruptions ; and if not early death, premature old age. The sad victims of these vices are haunted with unhappy feelings—they do not take the world as it is—their judgement is impaired—and insanity is often the result. Their countenances present a cheerless, or cadaverous appearance—never exhibiting that joyous glow replete with life, that beams out from every lineament of the virtuous. We are not putting a public brand upon this sin ; for innocent disease will produce all of these appearances. But we have here given THE GREAT SECRET OF PROLONGING YOUTH, BEAUTY, AND LIFE.

Shakespeare, whose depth of penetration into human nature, makes him still the wonder of critics, well understood this. Therefore he makes his actor say—

“Though I look old, yet I am strong and lusty ;
For in my youth I never did apply
Hot and rebellious liquors in my blood ;
*And did not, with unbashful forehead woo
The means of weakness and debility.”*

These remarks apply as well to the married as the unmarried, but not equally as well to females as to males.—The peculiar organization of females do not admit solitary errors of the same extent as the other sex ; besides their superior chastity forbids it. However such is their analogy, it is well they should know these things—they should know too, that every *sensation* requires an expenditure of force ; and the exalted relations of the human race demand that the greater amount of mental action should be of a moral and intellectual nature.

But to the fair sex belongs the pleasures and responsibilities of fostering the chaotic molecules of vitality, and of moulding the bodies and the minds of future generations. This is their most important field of virtue and of vice. *Children*, especially boys, *most generally resemble the mother*. It is from this law that we are to expect so much from the education of females. The acquired character of the man perishes in a great measure with himself ; but *when we educate the females we educate two generations*.

No fact is better attested than the power of the mother, while she is *encient*, to impress upon her offspring, a mental organization corresponding with her then state of feeling.

It is well known that the imagization often imparts corresponding "*marks*" to the body ; and it is a curious fact that most of these are representations of plums, cherries, raisins, whortle berries, or the like, caused by an undue "*longing* ;" a striking hint that she who first ate the "forbidden fruit," still possess a responsible power, pregnant with the weal or woe of coming ages.

This particular time with the daughters of Eve, is a period of probation, in which, if its wayward tendency of mind are nobly conquered, there cannot fail to be imported a corresponding nobleness to their children. The cause of the peculiar character of many great geniuses have been traced to the circumstances of their mothers, cotemporary with their embryo state. The specific powers of Zerah Colburn, the great mental calculator, were derived from the efforts of his mother to calculate her yarn for the loom, while *encient*. And the celebrated John Wesley said if he were to write his life, he would commence it before he was born, &c.

It must be remembered that the perfection of the child, in utero, requires vital force ; and if this be prostituted, at that time to improper sensualities, the growth of the child will be robbed as well as its faculties debased. To the violation of this rule, observing writers have attributed cases of imbecility and idiocy. For the same reason, excessive labor must at that time be avoided.

Many plants, when taken from a southern to a northern latitude, will, after a few years, lessen in their period of maturity, diminish in their size, and deteriorate in all their qualities ; and again, after being cultivated in their native climate a few years, they are restored to their pristine state. Here the human race may read, deeply engraven in nature, the laws of their own propogation—IMMUTABLE CONDITIONS, by the violation, or observance of which "all flesh may eventually corrupt its way on earth ;" or rise to the dignity of the "sons of God." We have a two-fold evi-

dence that the God of Nature and Revelation will "visit the iniquities of the fathers upon the children unto the third and fourth generation." And we do not hesitate to say that by a due observance of physiological law, the seventh generation, within the period of three score and ten, may almost bid defiance to disease, and triumphantly exclaim, even in a physical sense, "O death where is thy sting, O grave, where is thy victory."

We must here interpose our protest against those doctrines, whether Infidel or Christian, that represents man as acting under a "*fatal necessity*." They tend to paralyze responsibility. He who preaches them, sins against his own intuitive senses, and contradicts the Creator to his face.

As our identity of *to-morrow* must depend upon the consequences of *to-day*, so our identity in ETERNITY must depend upon the consequences of TIME; as *hope* is related to the *future*, and *conscience* to *law*, so we, in all our acts, are investing an interest in future generations. HE THAT HAS A WILL TO ACT, LET HIM ACT; FOR THE LAST OF OUR RACE SHALL JUDGE US.

CHAP. II.

PATHOLOGY, OR THE NATURE OF DISEASE.

This is the most disputed part of medical science. It is from this, as from head quarters, that the various schools have endeavored to derive authority for their different modes of practice.

Pathology describes the state of the body in disease ; and includes its causes, and the classification of its different forms. The causes of disease are divided into three kinds—predisposing, exciting, and proximate causes.

The predisposing causes are simply a weakness in some one or more of the systems of the body, which make them more liable than others to be effected by deleterious agents. *Predisposition* is often *inherited* ; about which there prevails some false notions—as though it were like the seed of noxious weeds in a soil, which would inevitably grow upon a congenial season. It is true that actual disease is sometimes inherited. But predisposition is only the fitness of the soil for certain states of disease, instead of health.

If the seeds be not sown, the individual may enjoy life to a comparative old age. Predisposition may also be *acquired* ; particularly by intemperance. It is remarkable that inherited disease seldom appears before the age of puberty ; therefore, it may in a great measure be avoided.

The *exciting causes* are the agents which develop disease—they are the seeds which cause the noxious weeds to grow. We need not use many words with the intelligent reader, to show that the same exciting cause, as cold, may, in constitutions differently predisposed, produce disease in a variety of forms, as consumption, dropsy, rheumatism, or spasms, according with the nature of the organ, or part of system affected.

In all these cases, we shall find a diminution of vital force—A WANT OF POWER TO CONTINUE HEALTHY ACTION, IS THE GENERAL PRINCIPLE OF DISEASE.

Again, we need not use much argument to show that the deficiency of action may be produced by a variety of exciting causes, as cold, heat, malaria, poisons, &c. So we may illustrate disease as a sort of focus; from which we may diverge to a variety of exciting causes on the one hand, and to a variety of forms of disease on the other.

The proximate cause, is that particular state of the tissues, in which disease manifests itself; whether inflammation, or paralysis; a contraction, or enlargement;—and in tangible facts, it is the same as the disease itself.

Thomson, instead of saying that disease is a deficiency of action, has assigned it to its most general exciting cause, *cold*. He admits that *heat*, as instanced in a burn, may produce disease, but still he calls the effect of a burn, cold; thus, as a sort of technicality, he puts the most common exciting cause as the sole proximate cause. The convenience of this appears in its more readily suggesting the means of cure, which must be its opposite, *heat*; and it is a fact that the legitimate effect of cold is to produce contraction, obstruction and deficiency of power, while heat, by direct application, or by such medicines as will cause it in the body, is the most direct means of removing those difficulties, whether caused by cold or any thing else. It is a remarkable fact, corroborating the theory and language of Thomson, that heat may be successfully applied to prevent a burn from blistering. Some people are in the habit, when they have burned themselves slightly, of exposing the part again to heat, as they say, to draw out the fire. The pathology of blistering appears to depend upon the obstruction of the perspirable vessels, which allows the

fluid to collect under the cuticle. Anything applied which will expand or relax these vessels, will prevent the blistering. A natural degree of heat, in a measure, effects this purpose.

Again, to be more exact. Thomson sometimes considers cold as the exciting cause, and obstructed perspiration as the proximate cause of all disease; and although we see that other deleterious agents applied internally will cause obstructed perspiration, yet we must not forget that heat is as strictly necessary to remove this obstruction as in the former case.

The obstruction of perspiration is certainly the most convenient point for us to begin to consider the nature of disease. In this case we discover in the first place a simple derangement of the circulating fluids---the perspirable matter not being able to pass off at the skin, is obliged to seek vent, for instance, at the lungs, in which case it is always attended, or rather, resisted by a degree of inflammation and hoarseness before the unnatural passage is allowed. In constitutions differently predisposed, the fluid will determine to the head, the pleura, liver or some other port; in all of which it is resisted by an inflammation before an effusion of fluid is suffered to take place. It is easy to see that an obstruction of this kind may result in many forms of disease, particularly pulmonary consumption.

There is sometimes an induration of vessels of the lymphatic system upon the lungs, called tubercles, which precedes the latter disease; but even in this case we must not disregard the great effect which the determination of the fluids have upon the lungs---indueing a natural perspiration will always relieve the symptoms of even tuberculous consumption; a diarrhœa checks its action upon the lungs; and the increased determination to the uterus in pregnancy, seems entirely to arrest it.

In the first place we find a simple obstruction which is easy to be removed, this results in inflammation, which may still be removed with comparative ease;---but inflammation if not removed, results in mortification, which is hopeless; or in suppuration, in which we must wait

in a great measure, the work of nature; or in chronic inflammation, in which we find an adaptation of the vessels to a diseased state. The two extremes of this inseparable chain constitute the only natural grand divisions of disease—*acute* and *chronic*. Of the utmost extremes, one is very curable, the other incurable—between are different stages, with different degrees of curability. *Acute* disease is more prominently marked by obstruction and derangement, attended with fever and inflammation, and other efforts of nature to remove them.—*Chronic* disease is more prominently marked by a change of structure, and unnatural secretion. The greater this change, the more difficult the cure.

Acute disease is naturally divided into two classes; firstly, those principally effecting the vessels, as fever, inflammation, congestion, and morbid secretion; secondly those principally effecting the nerves, as spasm, hysteria, neuralgia, and insanity. The first class have been the greatest field of speculation, and are of the most importance to the physician, because it is only through the medium of the vessels that we are enabled to effect the nerves.

The phenomena of fever has met with even a greater variety of explanation than modes of treatment. Hippocrates taught that it was owing to an excess of one of the four humors of the body, blood, phlegm, yellow, and blackbile; each of which produced a different kind of fever, &c. Sydenham taught that this disease was caused by an impure state of the air; particles of which became incorporated with the blood, &c. Boerhaave, that it was owing to a glutinous or viscid state of the blood, &c. Clutterbuck assigned it to a primary inflammation of the brain; and Brussais to an inflammation of the mucous membrane of the stomach and bowels.—Currie said it was a morbid production of heat; and Perkins, an excess of electricity.

Again others pretend to know nothing of its cause, or hardly to describe it. Dr. Thomas says, "It is impossible to give a concise and proper definition of the disease known by the name of fever."

Professor Jackson says, "This problem has continued

unsolved." Dr. Good says, "no complaint is so difficult to be defined."

Dr. Southwood Smith says, "there is scarcely one point in this disease on which physicians are agreed."

Liebig says, "physicians all along to the present, have been unable to say what fever is."

In fact, some physicians are content with merely saying that fever is fever. Yet it is a subject of vast importance.

Morgagni says, "Of all disease, fever is the most frequent, and presents itself under the greatest diversity of forms."

Good says, "No complaint is so common as fever."

Dr. Gregory says, "that it exists in eight ninths of all diseases."

Thomson says, "in all."

But all the mentioned theories are more or less erroneous, and suggest anything but the true mode of practice. Very different is the theory of Thomson.—He holds that the heat of fever, like animal heat at all other times, is a friend to nature, and that the phenomena of fever is an unequal distribution of it;—that the heat accumulates upon the surface, and that the centre of the body is relatively cooler than natural. This at once dictates the practice—to increase the internal heat with stimulants, and lower the external heat by producing a natural perspiration—and the success of the practice every day verifies its correctness.

For an account of the manner in which the suppression of perspiration elevates the temperature of the body, we must refer the reader to the preceding chapter. Finding it possible for our reasoning on the subject to meet with cavillers, we will here give some authority. "Evaporation takes place constantly from the surface of our bodies; and it is owing to this circumstance that men are enabled to undergo exercise during the heat of the summer. In general, the more violent the exercise, the greater is the quantity of perspiration arising from the surface, and consequently the greater the quantity of heat carried away.

In this manner nature regulates the heat of the sys-

tem, and during health sustains the equilibrium of the animal temperature. When ever this exhalation from the skin is suppressed, which only results from disease, the temperature of the system rises, and *fever* succeeds. In some cases of this kind of the heat of the human body exceeds that of the standard of health by seven or eight degrees."—*Comstock's Chemistry*.

Since the days of Franklin, who has the honor of first explaining this law of nature, we find abundant evidence of this kind in philosophical writings not medical; but until recently, physicians seem to have taken no notice of it; no doubt because it did not agree with their antiphillogistic practice; or in other words a practice which tended to reduce action and animal heat. In all of the old theories before mentioned we find one general supposition, that acute diseases are preternatural, and require the antiphillogistic treatment. This is totally denied by Thomson, partially so by Brown, condemned by the reasoning and experiments of Majendie and other physiologists; in a measure abandoned by the faculty, and we might have hoped that the world would soon be rid of this curse to human life; but the doctrine has recently found a strong hold in the writings of the talented Liebig. He assigns the cause of fever, and all disease, to the want of equality between the waste and supply which takes place in the capillary vessels of the body. It is true that this is a phenomena second in importance to none but the suppression of perspiration; and perhaps the chief proximate cause in inflammations. He regards the oxygen of the atmosphere as the sole cause of the change of matter and of the developement of the vital force, which holds the tissues in combination, as its antagonist. He holds that a weakening of the vital force, by cold or otherwise, allows the cause of waste to predominate; and as motion is dependent on a change of matter, so an increased change of matter is followed by an increase of motions, as seen in the accelerated pulse—this is simple fever. And when the change is so great that it cannot all be expended upon involuntary motions, it extends itself to the apparatus of voluntary motions—this is a febrile paroxysm, as seen in intermittents.

Now all this is very plausible, but it is curious to see

what a miserable aspect the author's reason immediately takes when applied to explain the anti-phillogistic treatment of the day. In his own language. "In consequence of the acceleration of circulation in the state of fever, a greater amount of arterial blood, and, consequently of oxygen is conveyed to the diseased part, as well as to all other parts; and if the active force in the healthy parts continue, the whole excess of oxygen is exerted upon the diseased part alone." "In certain cases medicine removes these diseased conditions, by exciting in the vicinity of the diseased part, or any other convenient situation, an *artificial diseased state* (as by *blisters; sinapisms, or seatons*;) thus diminishing, by means of artificial disturbance, the resistance offered to the external causes of change in these parts by the vital force. The physician succeeds in putting an end to the original diseased condition when the disturbance artificially excited exceeds in amount the diseased state to be overcome. In cases of a different kind, when artificial external disturbance produces no effect, the physician adopts other *indirect methods* to exalt the resistance offered by the vital force. He diminishes, by *blood letting* the number of carriers of oxygen (the globules) and by this means the conditions of change of matter. He carefully excludes from the food all such matters as are capable of conversion into blood."

Now compare the practice with his theory. "A complete cure of the original disease occurs, when external action and resistance in the diseased part are brought into equilibrium" "If the physician accomplishes this *without arresting the functions of the other organs* their restoration to health is certain." "*The very same method may restore health in one individual, which, if applied to another may prove fatal in its effect.* Thus in certain inflammatory diseases, and in highly muscular subjects, the anti-phillogistic treatment has a very high value; while in other cases *blood letting produces unfavorable results.*" None but Thomsonians can fully realize the absurdities of this language. In their practice we find none of those artificial diseases, none of those "indirect methods"—none of those fearful "ifs."

Again hear Liebig. The *vivifying* agency of the blood

must ever continue to be the most important condition in the restoration of a disturbed equilibrium; and the blood must be considered, and constantly kept in view, as the ultimate and most powerful cause of a lasting vital resistance, as well in the diseased, as the unaffected parts of the body." Yet in view of these contradictories, he says the results of blistering and blood letting are such, "that the most perfect theory could hardly have pointed them out more accurately or more justly than has been done by the observation of sagacious practitioners." From the treasures of the profoundest knowledge, here is indeed a costly sacrifice brought to the altar of that molock of the medical faculty, the "anti-philogistic treatment." But Liebig is not to blame, for the medical practice of Europe furnished him no better data for reasoning.

We are sorry that it devolves upon one so liable to error as ourself, to show wherein animal chemistry points to a very different medical practice. It seems to be an error common to genius, to make too much of their favorite subjects—to assign too many effects to one cause. This appears to be the case with Liebig. He refers fever in no degree to suppressed perspiration. He assumes that "the act of waste of matter occurs in consequence of the absorption of oxygen into the substance of the living parts;" and that this oxidation develops alike, the vital force, (the cause of motion,) and heat. But Liebig has not told us how it is that there is a constant metamorphosis going on, without oxidation, as manifested in the *lymph* of the absorbent system. Neither has he shown us how it can agree with his assumption that the blood has a higher degree of heat in the left side of the heart than in the right.

But the reader will recollect that in the last case the blood had just received a new accession of lymph and oxygen; consequently the combustion and heat must be greatest in the arteries and in the *centre* of the body; whereas in Liebig's view, it must be the greatest in the veins, and upon the *surface*.

Nor has Liebig told us, if heat, and the cause of motion are produced simultaneously, how it is, in intermittent fevers that the greatest amount of motion is exhibited at first, and the heat afterward. According to this author,

the ague of an intermittent must determine a rapid change of matter ; and we can only suppose that this change is mostly the production of lymph, which must set at liberty the force which held the previous combination, and appears in the involuntary motions, or shudderings of that stage of the disease ; and that the large production of lymph, after a circuitous route, meets with the oxygen in the arteries, thus producing a vigorous reaction of heat, and puts a stop to the metamorphoses.

Here we find that disease results in an effort of nature to remove it. We find nothing that indicates blood letting, blisters, and seatons ; but on the contrary that ague should be prevented by stimulants, tonics, and every means that will keep up a capillary action.

We observe in intermittents that the comparative state of health, or equilibrium does not take place until the sweating stage ; and furthermore that during, and immediately previous to the paroxysm the patient cannot digest food. This shows that *nutrition is checked while the metamorphosis continues*. This is the case with all fevers ; for one of their most invariable symptoms is want of digestive power, and generally want of appetite. How little has this most important symptom governed the practice of the regulars ? Why is the digestion and appetite gone ? Because the great office the arterial capillaries is suspended—nutrition ; and this state is sure to be caused, and is always attended by an obstruction of the passages of the waste matter—the perspiratory organs. Therefore the only cure indicated, is to cleanse the stomach and bowels, stimulate the capillary vessels to action, and open the pores of the skin. Nothing ever discovered, can do this so well as a Thomsonian course of medicine.

In our own language, we mean by waste matter, that which is oxidized, and rendered useless ;—by change or metamorphosis, the conversion of tissue into lymph ;—by nutrition, the replacement of new matter in the tissue.

The translator of Liebig's work uses the words change or metamorphosis, and waste, as synonymous ; because Liebig teaches that metamorphosis and oxidation are simultaneous. Our idea, that the change of matter and ac-

tion of the absorbents continues when nutrition is stopped and the capillaries are cold and collapsed, may meet with doubts ; but it is necessary to restore the heat and vascular action ; and Mascagne found that the action of the absorbents, and the change of matter continued twenty four hours after death.

Desengettes and Valentin have made similar observations. Thus we see that fever, and probably all other disease, is attended with a preponderance of metamorphosis and waste, over digestion and nutrition ; and the only cure indicated is to restore digestive and capillary action.

Liebeg has expressed the same essential principle. "Disease occurs when the sum of vital force, which tends to neutralize all causes of disturbance is weaker than the *acting* cause of disturbance." But how different is his treatment—only "*indirect methods*"—to divert the consuming power of the oxygen from a diseased to a healthy part by creating "*artificial disease*;" and if this fails to diminish the absorption of oxygen by blood letting, and a non-nitrogenized diet.

We sincerely regret to see his splendid talents and philosophy warped to a system of treatment that has always been fraught with such disastrous consequences to mankind.

WE FIND FROM THE PRECEDING CONSIDERATIONS, THAT THE SUPPRESSION OF PERSPIRATION, AND THE CESSATION OF NUTRITION, CONSTITUTE THE MOST IMPORTANT PATHOLOGICAL CONDITIONS, OR PROXIMATE CAUSES OF FEVER.

Inflammation comes next to be examined. This has been justly considered by all writers, as closely allied to fever ;—inflammation sometimes standing as the cause of fever, and fever sometime the cause of inflammation. This state of disease is characterised by heat and redness of some local part, and generally by swelling and pain.

When it occurs in deep seated organs, we cannot suppose that the excess of heat is caused by supposed perspiration, or any similar exhalation ; but the swelling, the suppuration, &c., which attends this complaint, forces us to conclude that the action of the absorbents are suppressed, and that the metamorphosed matter is consumed in the part where it is detached ; thus creating local heat. When the

change of matter is greater than the supply of oxygen it results in suppuration; and if the nerves be much impaired, in mortification. Nature then demands that the circulation of oxygen be increased in the part. It is a fact that where suppuration has commenced the application of stimulants will cause it to be less than if nature were unaided. It is a fact that the tincture of cayenne applied to inflamed surfaces will produce essential benefit. But how different is the anti-phillogistic treatment as sanctioned by Liebig—bleeding and counter disturbance; with the supposition that stimulants are highly dangerous. Shame on the philosophy that condemns any fact without testing its nature. Ask those physicians who are so loud in their denunciations against cayenne, lobelia, and other diffusable stimulants of the Thomsonian school, if they ever gave them a thorough trial in an inflammatory fever; and they will universally answer, no.

The pathological difference between fever and inflammation has never been explained. The talented Dr. Armstrong in speaking of the disputes upon inflammation, cites the language of Newton when he compared himself to a person who had found a few curious pebbles upon the sea shore; and remarks, "such a reflection we may, with deep humility apply to ourselves."

But we have seen that the heat of the animal body indisputably depends upon a species of combustion;—we have seen that the elevation of heat in fever is indisputably caused by suppressed perspiration;—we have seen that the elevated heat of inflammation cannot alone be caused by this; and that it can have no other cause than suppression of absorption, and the combustion of waste matter in the part inflamed.

Most of the disputes with regard to inflammation, have been confined to the rapidity of circulation in the diseased part. The strongest evidence is that it is quickened or rather increased in quantity; for the artery and vein leading to, and from, an inflamed part, frequently become enlarged; showing an effort of nature that should not be directly counteracted. The arterial blood also penetrates many of the capillaries, which before only contained a colorless fluid. This may be proved by pressing the fin;

ger upon an inflamed part so as to cause a white circle around it; when at every pulsation the circle will partly disappear. It is also proved by the changed color in the vessels of an inflamed eye.

It is this unusual pulsation affecting the nerves of sense that causes throbbing. That the absorbents are obstructed is proved by the inflammation that in some cases extends along the surface over the large lymphatic vessels; sometimes reaching from the foot to the groin, and affecting the lymphatic glands there.

It is a very wise economy that the arterial blood penetrates the nutritive capillaries in these cases; because it consumes the lymph which the absorbents cannot carry away, thus preventing supparation, while it produces heat, which is necessary to preserve the part from further change, open the contracted vessels, and carry on nutrition.

According to the preceding views we have now found a solution of the long pending problem between intermittent and continued fever. In the former we find a sudden suppression of nutrition, attend with a rapid metamorphosis, and increased action of the lymphatics, to which the shivering motions are necessary. The lymph at length reaches the lungs and heart, a reaction of heat takes place, and a balance of action again succeeds;—when the additional strength from this effort of nature subsides, another paroxysm again occurs.

In continued fever, there is not only a suppression of nutrition but of absorption; so that the metamorphosed matter must be oxidized and an excess of heat produced in the parts obstructed. In fevers of the typhus character the capillaries and absorbents are not only affected but the nervous texture becomes impaired; nervous symptoms, putrescency, and mortification occur. Thus we see that these three natural divisions of fever depend upon the number of systems affected, and it is a fact, as should be expected, that their danger is graded accordingly; the typhus being the most dangerous, and the intermittent the least.—There is a species of fever between the intermittent and the continued, where there is but a very slight and short cessation of the paroxysms, called remittent fever. The ob-

ject of the regular always is to convert this fever into an intermittent, which if done, he considers his patient safe.

Thomson has noticed the difference between the fatality of these fevers, saying that in the intermittent or ague and fever there was nearly a balance between the cold (deficiency of action) and heat (healthy action;) the heat keeping little the *advantage*.

In these fevers it must not be forgotten, that although abnormal heat may be produced by a rapid metamorphosis, and an obstruction of the lymphatics, obstruction of perspiration always assists to elevate the temperature; also that the heat of fever is a friend—a restorative effect—that the causes which immediately produce it must not be repressed; but increased, as the only means of restoring a healthy state to the tissues, and a normal distribution, and proportion of heat in the body.

The recession of blood from the surface in intermittents and its engorgement in the heart, lungs, liver, &c., is called a *congestion*. There is a form of disease in which this accumulation is not followed by a reaction, called congestive fever. Nothing could more strongly indicate Thomsonian remedies than such cases. Listen to Dr. Armstrong, a regular, on the subject. “The indication of the treatment of this form is to restore the natural balance between the arterial and venous circulation. How is this to be accomplished.

1st. By *exciting* the heart through the internal administration of stimulants.

2d. By *exciting* the skin through the external application of caloric.”

Now when nature produces the *excitement* alone, shall that excitement be fought against? Say ye regulars.

In the cold climates there is frequently found a continued fever called *synocha*, whose pathological condition, at first, is solely obstructed perspiration; attended with high heat, frequent strong, and hard pulse; yet common people sometimes cure it by a thorough application of stimulants, in spite of the increased action of the arterial system, which is so frightful to the regulars. It must

be remembered that the increase of action in the pulse is only relative—that the aggregate amount of action is deficient; else, patients in fever would be the most profitable laborers.

One of the most certain signs of incurable debility, is the quickness of the pulse. When death is approaching it often becomes a mere flutter; yet to directly prevent this increased action, is the foundation of the anti-phlogistic treatment.

When synochal fever proceeds to affect the body more extensively it is successively named, synochus, nervous, and typhus or putrid fever.

The intermittent, and remittent fevers are called bilious fevers, on account of the discharge of bile and derangement of the liver which attends them, caused by the congestion of the blood in the digestive system.—The spleen also, an organ situated on the left of the stomach, and which is calculated for a reservoir of blood when it receds from the surface, is also sometimes hardened, or enlarged. This has led some to think that the cause of these fevers are situated in these parts, particularly the liver, and therefore try to carry it off by bilious evacuations. But this may only give temporary relief, while it increases the general congestion. Armstrong states that cathartics the medicines generally used have a decided tendency to induce congestion.—The pathology of the spleen at once indicates the mode of treatment in these fevers. This organ has no secretory outlet—it is not a gland, and can be disgorged only by a diffusion of blood again to the surface.

The exciting cause of the bilious fevers appears to be a peculiar gas arising from decaying vegetable and animal matter, under particular circumstances, called malaria, or marsh miasmata. The proximate cause seems to be a general debility, or laxity of the vessels; consequently it is pretty uniformly relieved by the bracing effect of cold weather, and tonic medicines.

If we wish to give all fevers a meaning name or definition, *suppression of perspiration*, and obstruction of *nutrition* are the best terms we can use. It denotes the cure—loss of appetite and digestion always attend them. The

tongue becomes coated, and the surface of the stomach and intestines are in a similar condition ; as if to prevent the absorption of nutriment which would be useless and deleterious. Tonics, which only produce contractility of the vessels, seem to operate only upon the effect ; while emetics and stimulants, which effect nutrition are much better to remove the cause ; however both should be conjoined. It is well known that the cause of intermittents will remain in the system through winter, unobserved, and be developed by the warm relaxing weather of spring. Therefore they are in a measure chronic ; and must require time to remove them. So it is with the common synochal fever, when suffered to run until the alimentary canal is effected. In the first stage we have only to open the pores of the skin ; but if we do this in the second stage the fever will return ; its nucleus is then in the alimentary canal ; this cannot supply nutriment to keep up a natural action at the surface ; so that we have then the double work of relieving the surface while we put the stomach &c., in a condition to digest food. Those who are affected with synochal fever are generally robust, and therefore neglect their disease until it is seated ; consequently, they needlessly lose, sometimes two or three weeks, even under the best Thomsonian treatment. Those who read this will do well to bear it in mind. They will do well to remember that the longer a disease has continued the slower it will be to cure ; that medicines and means must be perseveringly repeated to cure chronic maladies.

Typhoid symptoms are found in the last stages of all fevers ; but sometimes the typhus fever is produced at once by an epidemic contagion. The yellow fever has been thought to be contagious ; but it is no doubt a mistake. It depends upon a malarial poison, closely allied to that which produces the other billious fevers. It is developed from certain districts by a long continued heat above 80 degrees, when the soil is dry. Copious showers of rain, or lowering of the temperature to a certain point immediately puts a stop to it. Therefore it is principally confined to tropical climates ; and the inhabitants of New York, and Philadelphia need not expect its recurrence without a long continued heat, above 80 degrees.

When we consider that synochal fever often runs into typhus, that the typhus character often attends billious fevers, that billious fevers have been traced, in all grades from the most mild intermittent, to the most malignant yellow fever, that there is no natural dividing line between acute and chronic disease, we must conclude that DISEASE CONSISTS OF ONE GENERAL PRINCIPLE; THAT THE DIFFERENCE OF PHANOMENA CONSISTS ONLY IN THE DIFFERENCE OF CIRCUMSTANCE, AND THE DEGREE OF DAMAGE.

For illustration; the synochal fevers are attended with a debility mainly of the cutaneous system; the billious fevers are attended mostly with a debility of the digestive system; in yellow fever the stomach seems to be affected as by a corrosive poison.

THE PATHOLOGY OF DIFFERENT STRUCTURES OF THE HUMAN BODY WILL DIFFER AS MUCH AS THEIR PHYSIOLOGY.

The doctrine of a great variety of different diseases has been used to support a great variety of different medicines, and curious experiments upon the human body; whereas pathology teaches that medicines should be few and simple.

Although we hold that medicines should be simple and correspond in one general principle, yet as different organs and structures are affected so we must adapt that principle in a variety of ways to correspond with the physiology and circumstance of the part affected. This is particularly requisite in local obstructions. It requires some degree of knowledge, on the part of the practitioner or nurse, to distinguish the diseased part in some cases; but to a good judgement it is easily taught; and for the particular rules of it, we must refer the reader to the succeeding chapters. Meanwhile, the pursuance of its philosophy leads us to other distinctions in disease, termed *idiopathic* and *sympomatic*. We have a striking example of this in sciatica or hip disease; in which the pain and seat of disease, in the commencement, is referred entirely to the knee.

The nerve becomes injured at the hip, but the pain can be expressed only by its sensient extremity at the knee.—The idiopathic affection is in the hip; the sympathetic affection is in the knee. In a similar way disease of the

liver produces pain in the shoulder ; affections of the alimentary canal produces affections of the brain, or whole nervous system &c.

Fever in many instances is a sympathetic action from local inflammation ; in which case the fever cannot be permanently subdued until the inflammation is removed.

This leads us to examine the received doctrine of sympathy, the laws of which do not appear to be well defined.

According to Hooper "Sympathy is divided into, first, the sympathy of *equilibrium*, in which one part is weakened by the increased action of another ; and, secondly, the sympathy of *association*, in which two parts act together at the same time."

"The sympathy of association is produced suddenly and for a short time. The sympathy of equilibrium is produced more slowly and continues to operate for a much longer time."

Such is the standard authority of the regulars, but we doubt whether such a distinction of sympathy exists in nature. In the examples they give, we discover nothing but a superficial view of sympathy proper, or their sympathy of association. Their doctrine of the sympathy of equilibrium seems to be mainly supported by their favorite use of blisters, and counter irritants ; but Liebig has shown that these depend upon a different cause.

When an inflammation, or fever occurs, the stomach is always weakened. This is given as an instance of sympathy of equilibrium. But the mistake consists in calling the disease a preternatural action. Fever and inflammation are attended with deficient nutrition, and as should be, there is deficient digestion. It is the sympathy of association.

Beaumont found that when the perspiration was suppressed, so was the secretion of gastric juice.

It is true there is a reciprocity of secretion between certain organs ; for instance when cold lessens the excretion of perspiration, it increases the excretion urine ; but it is done through the medium of the *vessels*, and should be called a *relation* instead of *sympathy*. But if the pores be abnormally closed, then through the medium of the

nerves, the urine will be suppressed, the lungs be constricted &c., showing a general sympathy of association. In fact we can find but one kind of sympathy in all the examples furnished in the body. It is true that when an excessive supply of vital force is demanded for one part it must be withheld from others. This, with the equilibrium of excretion, already mentioned, confounded with the proper law of sympathy, is all that has enabled the regulars to found the doctrine of a sympathy of equilibrium.

Excepting Liebig's "*indirect*" reasoning, there is not, then, left a shadow of foundation for the use of counter irritants. We have known, by experience, a blister to aggravate all the symptoms of a fever; and much similar testimony may be found in medical authors.

It is true, that sometimes there is a determination of the blood to the head, which may be relieved by putting the feet into hot water; but this is more an effect upon the vessels than the nerves, and we doubt whether it should be called sympathy of equilibrium. Certain it is that stimulants internally, by the sympathy of association, will produce the same effect. The same remark may apply to any congestion.

When the stomach is supplied with a meal, digestion goes on better with moderate exercise. If the person sleep, digestion is retarded; if he awake it is hastened, without regard to exercise. The action of the brain and muscles, are then, sympathetic with the stomach.

On the other hand if the action of any one part is destroyed the whole severely suffers. Therefore, THE LAW OF SYMPATHY TENDS TO PRODUCE, AT THE SAME TIME, A UNIVERSAL ACTION OF THE ORGANS. Anything which tends to destroy the balance of action, tends to produce disease. In an emotion of feeling, there is a flow of blood into the organ of brain exercised. If this be excessive, and long continued the balance of action in the brain is destroyed, constituting insanity.

Therefore, in all disease, of whatever name, it must be more or less the object of the physician to restore an equilibrium of circulation. But he must never attempt this by counter irritants, for they produce "artificial disease;"

and are therefore contrary to the law of sympathy; the only law by which equilibrium can be restored.

Hitherto we have considered principally the proximate cause of disease. We will now turn our attention to the exciting causes where we shall find a field very much neglected by physicians. These causes may be divided into three classes, transient, habitual, and contagious. In the first are malaria, cold, and poisons; the first two of which have been considered; the third is treated in the chapter on therapeutics.

The second class, habits, are often found to be a constant exciting cause of disease; and unless they be removed, medicine will be of little avail. Among the most common, are errors in diet—eating irregularly—eating greasy and indigestible food—and too much in quantity. The stomach when deranged will acquire the habit of desiring food before the last meal is digested. This is a cause of disease that can only be cured by regimen. The appetite can be brought to desire most unnatural articles, as well as immense quantities of food.

Habit is capable of making monsters of the human race. Witness drunkards. Witness the canine appetite produced by jugglers. In 1821, a man died at the Bellevue Hospital, New York, from the effects of swallowing fourteen clasp knives, one of which was four inches long. He commenced the habit at the age of fifteen, by stealing marbles from his playmates and swallowing them. He then began swallowing knives for a reward. While serving in the American army, he swallowed for ten dollars an ordinary gold watch, with the chain and crystal; which passed on the ninth day. At another time he swallowed thirty four musket balls. Finally, not from choice but from appetite, he would swallow buttons by the handfull, and other similar substances which fell in his way, until the habit became so troublesome that he was dismissed from service.

Tararc, a French soldier, from a similar cause, at length acquired such a voracious appetite that he swallowed in one day 4 lbs. of cows udder, 10 lbs. of raw beef, 2 lbs. of candles, and five bottles of porter. He would also devour

cats, dogs, and serpents. Several similar cases are on record. Beware of habit.

The next class of exciting causes to be considered, are contagious, such as produce the small pox, scarlet fever, &c., of which there are several species. These propagate their kind; and we are warranted in believing that they are either animalcula, or a vegetating principle analagous to mildew, perhaps both. Some, like the measles never take effect in the body the second time. The mumps may take effect in one parotid gland, and some years after in the other, but never twice in the same. Some, like the small pox are occasionally reproduced. As some plants unfit the soil for a second crop, so these contagions seem to render the body more or less incapable of reproducing their kind. That they depend on a living principle lodged in the system, is also proved by the kind of medicines that destroy them.—Sulphur and spirits turpentine will cure the itch; and these articles are also found to be very offensive to ordinary vermin.

Worms are a ponderous example of animalcula; and to make the analogy more perfect, the tape worm sometimes appears as a contagion, or epidemic at the Cape of Good Hope; and is found to be immediately destroyed by spirits turpentine.

As plants and animals choose different localities according to their kind, so different species of contagion fix upon different parts of the body. The eruptive kind, as small pox and scarlet fever, naturally operate upon the cutaneous system; and the first object of the physician must be to keep up a circulation to the surface so that they will remain there; but if the pores are suffered to become closed, the contagion works internally, and often destroys life. The second object of the physician will be to destroy the contagious principle; for the means of which, see the next chapter.

CHAP. III.

THERAPEUTICS, OR THE PRINCIPLES OF MEDICINE.

This branch teaches the nature of medicines, and their operation upon the body. But little is known of the means by which these agents effect vitality ; therefore it should not be expected that we can advance any thing very accurate on the subject. We can do little more than observe their phenomena, and by experience, and analogy, decide upon their congeniality to life.

Thomson has very justly placed

EMETICS

at the head of his *materia medica*. When we consider that the chemico vital charges in the body constitute the very *battery* and citadel of life ; and also the immediate dependance of these changes upon the stomach ; it must lead us to conclude, at a single step, that emetics exercise a very important influence upon them. It is not only a conclusion, *a priori*, but it has abundant evidence from experience. The regulars have observed that even their pernicious emetics will promote absorption, reduce dropsies, and disperse tumors. Some of them believe that emetics will completely arrest a common typhus fever in its first stage.

It is a signal favor to the Thomsonian System that the most perfect of all emetics *LOBELIA*, was discovered

by its founder. It is certainly the most *curative* article we possess.

Dr. A. Curtis, president of the American Medical Institute, at Cincinnati (*Thomsonian*, obliges us to say,) who was once a regular, says, in slight to all other medicines, "*give us lobelia for a cure.*"

But the regulars have seldom used emetics for any object excepting to evacuate the stomach; and those too, are of such a deleterious kind that they have only served to confirm the popular opinion that all emetics must be poisonous. This opinion is rather specious; but a little examination will convince any one that it is very bad logic to believe that because most poisons will vomit, all that vomits are poisons. If the received opinion be true, then warm water, the mothers milk, and even imagination are poisons.

Physiology teaches us that the powers of digestion, and emesis are *designed* as especial functions of the human stomach. We see the latter put into daily requisition by the infant when it is over fed. It is the safeguard of life.

In all animal races we find that the digestive power is in perfect relation to certain articles of food, which are not poisonous but congenial to it. The eye also, has a telescopic machinery in most wonderful relation to the laws of light—and light is not poisonous. And so with the ear; and why not so with all the excitable powers of the body; why not so with the emetic power. Food, light, and sound, are congenial stimulants of their related organs; and if there is no article in nature which is purely a stimulant of the emetic power; and no more inherently poisonous than the mothers milk, then we have found a chasm in the works of the CREATOR—a jargon in the music of Nature. To believe such a thing is to doubt Divine Goodness.

If Lobelia is a poison, why is it the most sovereign counterpoison we possess. If it is not congenial to life, why can it be given in doses repeated to a quarter of a pound; or in small doses long continued, with perfect safety; and, almost uniformly with benefit. No. In lobelia, and probably several other vegetables, we are

abundantly supplied with what we must regard as simply a stimulant of the emetic power.

What is the phenomena of this power? A restorative effort—in the stomach—in that organ called the “centre of sympathies.” We might then conclude, according to the law of *sympathy*, that, when a restorative effort is induced in the stomach, a like effort would be induced in any diseased locality. Such, certainly, is the therapeutic action of lobelia. Some patients, while under its operation, complain, of remarkable symptoms, and pains in the part affected. In one case there was severe pain in the diseased organs, which subsided by spells and was followed by vomiting. It was a case of debility, and the vital force could not be equally expended upon both parts at the same time. It should be remembered, that when by overtasking an organ, we produce dissympathy e. g., when we excite the brain so as to impair digestion, or overload the stomach so as to becloud thought, we transgress the laws of life. Such dissympathy sometimes becomes habitual. It is seen in ague and fever.

Armstrong tells us of a man whose intellect was only fit for business on every second day, attended with fever which was a constant habit. Although lobelia always tends to produce a general sympathy, yet in some cases it is governed by dissympathy. Sometimes the increased action of the stomach is attended with a chilliness of the surface; but sooner or later it is followed by a uniform action. In cases of difficult parturition, sometimes large doses will not vomit, but its whole effect seems to be spent upon the uterus; in which case it is the greatest aid the daughters of Eve have ever found.

A remarkable case of its communicating its restorative power to a part remote from the stomach, occurred in the practice of Dr. Wilcox. A patient, who for several years had nearly lost the use of one leg, from hip disease. one day, after taking a course of medicine, administered to himself an enema, containing a large portion of lobelia;—not operating soon, another of the same was repeated;—the effect was complete prostration, attended with excruciating pain in the diseased hip and

limb ;—when this subsided he vomited ; and getting up walked down stairs without his cane ; his useless limb, though formerly crooked, had become nearly as straight and useful as the other ; and continued so.

Nearly all vegetable medicines are compound ;—besides being an emetic, lobelia is also an excellent diffusible stimulant and a relaxant. It opens the pores of the skin—equalizes circulation—relaxes spasm—reduces the pulse of fever—arrests hemorrhage—promotes digestion—in fine, by virtue of its sanatory power upon the stomach, a sympathetic restorative effort is communicated to every fibre of the body—the great function of nutrition is rallied ; and the machinery of life again set in unimpeded motion.

We were pleased with the reply we heard a student make, a few years ago, before the board of censors of the N. Y. State Thomsonian Society. Being questioned on the properties of lobelia, he replied something in this manner, "Lobelia is an emetic, a diaphoretic, a diuretic, a hepatic, an expectorant, a peristaltic, a deobstruent ; a silagouge, a hydrogouge, an amenagogue ; a diffusible stimulant, a nervine, a relaxant, and indirectly a tonic."

As should be expected, according to the doctrine of the unity of disease, lobelia has the power of restoring the body from apparently opposite states. It will restore alike to a natural standard, the sluggish pulse of apoplexy, or the bounding pulse of inflammatory fever. It relieves alike, looseness or costiveness, profuse perspiration or obstructed perspiration, amenorrhoea or menorrhagia, strangury or diabetes ; prevents abortion,—or aids parturition agreeably to the laws of life.

Unlike poisonous emetics, lobelia aids digestion.—When given with food, in suitable quantity to vomit without food, it does not operate until the food is digested. Such is the close sympathy between the emetic and digestive powers, that when the former is excited by a natural stimulant, the latter more strong and constant, appropriates the force to itself. If the food be indigestible it does not excite the digestive power ; the emetic operates at once, and the food is thrown off.—

If it be necessary to evacuate the stomach of food immediately, on account of poison, we may accomplish our object by exciting the emetic power very much with large quantities of lobelia, aided by powerful stimulants, salærated water, and plenty of drinks.

We perceive then, that although the medicine does not cease to work in either case, yet the emetic and digestive powers counteract each other. Upon this principle depends the secret of curing spontaneous, or long continued vomiting. It consists in exciting the stomach with the most digestible food—chicken soup for instance. But mark the principle; for if you give it in a large draught it is rejected—it *mechanically* excites vomiting. But if given in small sips it presently excites the appetite and puts an end to nausea. Some use bears oil, and think it infallible—for practice consult the patients desire.

Lobelia is also the greatest anti-spasmodic with which we are acquainted—a sovereign cure for most recent cases of fits. The medicine, however, sometimes seems to produce spasms; but never by its legitimate effect; it is only when the disease tends to result in spasm;—spasm is an effort of nature; lobelia aids nature, and in those cases, it brings it on sooner, and makes it less;—if we wait till the spasm comes on spontaneously, lobelia, by increasing the effort of nature, throws them immediately out of it. The alarming prostration, and nervous agitation which lobelia sometimes produces, are observed to be almost invariably followed by a more rapid recovery to health. As to any danger from the medicine itself, there is no necessity of its being thrown off. It never acts as a cathartic, as has been published by Thacher; although it will sometimes put into action cathartic agents. The facility with which it operates as an emetic, when given by injection, has sometimes taken the regulars by surprise; and is not the only instance in which the Thomsonians have shown their superior knowledge of physiology and therapeutics.

In lobelia we have a substitute for all the bleeding, blistering, opium, and refrigerants of the regulars; with

this superior advantage, that while those operate upon the *effect*, this removes the *cause*.

In view of these facts, we must then conclude that LOBELIA IS A SIMPLE STIMULANT OF THE EMETIC POWER; AND THROUGH THE SYMPATHETIC CONNECTIONS OF THE STOMACH, ACTS AS A UNIVERSALLY SANATIVE AGENT IN THE BODY.

A different theory, of the therapeutic operation of this medicine has been taught by an intelligent and influential writer. He holds that it vomits by virtue of its great relaxing power; which is carried so far as to produce an organic sensibility of error, and a reacting effort takes place, which produces vomiting; similar to the manner in which a bow flies back when it is bent.

When we consider that some of the essential oils, and other articles, will relax the stomach very much without producing vomiting; and that strong astringents or tonics, or even the introduction of the finger into the throat, which cannot be preceded by relaxation, will produce immediate vomiting; we conclude that the physiology of vomiting does not depend upon relaxation. Besides it does not agree with our theory to believe that the therapeutic action of lobelia depends, in any degree, upon first effecting an unnatural state of the body.

Thomson says, "lobelia is searching, enlivening, quickening, and has a great power in removing all obstructions; but it soon exhausts itself, and if not followed by some other medicine to hold the vital heat till nature is able to support itself by digesting the food, it will not be sufficient to remove a disease that has become seated." This desideratum, he found in his

STIMULANTS

particularly, cayenne, which he has the honor of introducing into popular use as a medicine.

It would be curious, indeed, to know why cayenne produces heat in the animal body; all we can say of it, is, that like lobelia, it is a simple, safe, and natural stimulant of the vital powers; manifesting itself most prominently by increasing the circulation of the blood, and the production of heat. It increases all of the secretions, and like lobelia, restores the body from apparently opposite states. The

writer, whose opinion of lobelia we cited, thinks that cayenne acts in a similar manner; only the relaxations and contractions are more rapid. There is truly some analogy between them; but cayenne acts more upon the vessels, and less upon the nerves. It is greatly superior to all the stimulants formerly in use by the regulars, in as much as it has no narcotic, nor intoxicating effect, and holds its heat throughout the alimentary canal.

As fever attends nearly all disease, a simple fever may be taken as a proper clue to a general therapeutic system. The restoration of perspiration, and the nutritive state of the capillaries, is fully answered in our emetics and stimulants. But another agent is wanted to remove from the alimentary canal, the canker, apthe or thrush, which always attends suppression of nutrition. This Thomson found in his

ASTRINGENTS.

In his own language "When cold gets the advantage over the inward heat, the stomach and bowels become coated with canker, which prevents those numerous little vessels, calculated to nourish the system, from performing their duty." The articles which effect this most directly have a contracting, puckering, operation upon the mouth, which depends upon the proximate element, tannin. But as most vegetable medicines, are compound, so different astringent vegetables have very different effects.

Thomson says, those which leave the mouth rough and dry are bad, and those only which cause the saliva to flow freely, and leave the mouth moist and natural, should be used. The very popular opinion, that a medicine long used, loses its effect, has been applied too indiscriminately. It does not apply to astringents. They act by a chemical power upon morbid matter, and assist to detach it from the body. This power will act upon the same matter out of the body as well as in it; therefore they will never cease to have their cleansing effect, any more than water will cease to wash a persons hands. This renders these medicines particularly favorable in chronic disease, where a long continued treatment is necessary. It should be here observed, that the composition so much in use among the

Thomsonianism, has for its basis the best of all known astringents, bayberry.

We obtained our first knowledge of this article from Gale's Medical Electricity, which we studied when about twelve years old. Gale derived it from an old French author, where it was mentioned as having cured consumption.

The foregoing principles of materia medica, emetics, stimulants, and astringents, constitute Thomson's first three classes, or numbers; and are our main curative elements. Their main purpose is to regulate action, and remove morbid matter from the system. When this is done the patient is often very weak and needs something more to strengthen him.

This, Thomson found in his fourth class,

TONICS

or Bitters. The articles of this class impart strength and elasticity to the tissues, particularly the middle membrane of the arteries, and thus throw the blood into the capillaries; equalize circulation, and restore secretion; for which they are highly servicable to convalescent and debilitated patients. However, so great is their action upon the cellular tissue, which composes the basis of the skin, that they may, in improper times and quantities, obstruct perspiration; which should be carefully avoided. Astringents are, more or less, tonic.

We have remarked in the vegetable kingdom a striking relation between the quantity of certain kinds of medicine and the prevalence of certain forms of disease. There is no degree of ailment more common than that which requires tonics; and there is no medicine in the vegetable kingdom more common than the bitter principle.

The next most general difficulty, is canker, and morbid matter; and the next most general medicines, are astringents.

The next most common form of disease is obstruction; and the next most common medicines are stimulants.

The next, defective nutrition; and the next emetics, nearly all uncooked vegetables, which are not poisons, are medicines.

We are here reminded of an anecdote related by a regular as an instance of quackish presumption. A charlatan was called to a patient, and being out of medicine, took a bushel basket, and going into the woods, gathered a handful of leaves from every bush and tree. On being questioned for his reason, he replied, that among so many kinds, it would be strange, indeed, if there was not some medicine good for the patient. But ridiculous as it appears, such quackery possesses more science, than that practice which prefers mineral poisons to the simple and efficient medicines, with which our fields and woods abound.

Agreeably with these views, we should expect the necessity of administering tonics and astringents, a longer time, and in greater quantity than stimulants and emetics; and, in exact harmony, we find the body will more naturally bear their longer application. These things not only exhibit much wisdom in the economy of Nature, but point to a law against the whimsical use of the proverb, "The less medicine the better," when applied to the use of Thomsonian tonics and astringents in chronic disease.

The foregoing principles, constitute the basis of a general treatment, but besides there are several of lesser importance which belong to this class; as follows:

NERVINES.

It is well known that the regulars have thought themselves often obliged to depend upon the use of sedatives and narcotics. But in doing so, they have made the great blunder of lulling the efforts of Nature to sleep without removing the cause of disease. Their deleterious agents, given to lessen pain and vascular action—opium, digitalis, henbane &c., are entirely superceded by the curative effect of lobelia, and the Thomsonian stimulants. But notwithstanding we sometimes find a nervous irritability, and a want of sleep, which are very naturally remedied by a class of medicines we call nervines. Many an infant has been destroyed by the use of laudanum, or paragoric. But if the mother would give the worrisome child, when unwell, a little tincture of lobelia, followed with some of our nervines, the difficulty would be removed instead of being perpetuated. How medicines of this class act, we know

not, excepting that they appear to have an influence, more directly, and solely, on the nerves than any other. It is remarkable that most of them have a strong and rather unpleasant smell; as the Thomsonian valerian Motherwort, Assa-fetida, Skunk-cabbage &c. Some of our physicians have expressed but little faith in nervines; but the difficulty will be found in one of two causes; either cooking them too much, or using them too sparingly by

ANTISEPTICS.

There is a putrescency, or sort of fermentation, which takes in animal bodies, in some diseases; and which like yeast in vegetable matter, is capable of communicating the same kind of decomposition to healthy animal matter.—Terrible examples of it, sometimes happen to those who dissect dead bodies. Like vegetable fermentation, it probably has different stages; and one form constitutes the morbid or impure state of the body, approaching to gangrene or mortification. Such articles as will arrest this decomposition are called antiseptics.

For this purpose the ancients used to employ the aromatic spices, myrrh, and other resins, to embalm their dead bodies.

Myrrh constitutes the basis of the Thomsonian rheumatic drops, and is a reputed remedy for mortification. Charcoal is easily proved to be a powerful antiseptic. When calcined, it will immediately destroy the smell of putrid meat.

Chlorid of lime is also very powerful, but how far it may be applied to the human body we are not able to say. It is a little singular that yeast, a fermenting substance has been supposed to be very useful in mortification; and this in conjunction with charcoal, has been very much used of late years. We are, however inclined to impute the benefit of the yeast to its nutritive quality.

Hops, the milk weed, and smart weed enjoy considerable reputation as antiseptics. The pyroligneous acid, or acid of smoke is so powerful as to preserve meat a long time without any other preparation. This can be abundantly procured in tar water; and we apprehend it will become very useful in the contagious eruptive diseases; where we

believe there is a degree of putrescency which is the element of the animalcule or exciting cause. We are informed that in a certain section at the south, fumagations of tar are considered severeign medicine in scarlet fever. Its curative nature may also depend upon the turpentine or resinous quality of the article; which we will consider under the next head.

PURIFIERS.

Although venders of secret medicines have caused much duplicity, in endeavoring to make people believe that all diseases spring from impurities of the blood, yet the popular opinion that there are medicines which cleanse the system from, what are erroneously styled, "bad humors," we believe has some foundation in Nature.

But in the first place, we should remember that the blood is manufactured by the digestive system; and that it is cleansed of its ordinary impurities, principally by the cutaneous system; therefore, the first condition of pure blood, is to keep the alimentary canal, and the skin in a healthy state.

It is remarkable, that what are considered the most common signs of impure blood, are eruptions. Much of the treatment, employed by quacks and regulars, for removing this kind of difficulty consists in the use of cathartics. Now it is very easy, for any one versed in physiology, to see that cathartics, which determine the fluids inward, and reduce the action at the surface, might cause eruptive diseases to disappear without removing their cause. In fact in scarlet fever, small pox, and the like, cathartics are often fatal. But there are many articles, which have been used with more success in curing cutaneous diseases. In searching for a general principle in these medicines, the most certain we have hit upon is their resinous, or terebinthinate nature. This is verified in the sarsaparilla, spikenard, meadow fern, and pine. The produce of the two latter vegetables are known to be certain remedies for the itch; which, it is universally admitted, has for its exciting cause, an animalcule. It is possible that this class of exciting causes of disease has a greater limit than we have yet imagined. *In searching for means to destroy animalcule,*

we must be governed by this rule ; choose only such as will expel them, and yet be congenial to the human body. Happily, we are furnished with such medicines in the terebinthinate vegetables. It was the ignorant violation of this rule, that brought mercury into popular use. It was first introduced by the Arabian chemists, but such were its disastrous effects that it deservedly sunk into disrepute.

But about the year 1492 a horrible, contagious disease spread over christendom ; which gradually subsided into our modern syphillis. Paracelsus, who flourished soon after, was the first to introduce the use of mercury in this complaint. It is true that it will destroy the animalcula of the syphillis ; and if applied properly, and in season, may destroy all there is in the body, and effect a cure.

But if a little too late, it makes a bad matter worse ; for a little will not then avail ; and as it only cures the disease by virtue of its life destroying power, so it often times destroys the patient. It is by this cause that mercury cures the itch. Dr. Thomas, in his practice of Medicine, states that calomel, mixed with the small pox virus, will entirely destroy its innoculating power. We did not commence this chapter with the design of discussing the therapia or rather the toxicology of the regulars ; but while we are in contact with mercury, we will say that besides the life destroying power, already explained, there are but two other reasons for its use ; one is that it acts as a cathartic ; but this is worthless, since we have many articles equally as active, and far more safe ; the other is, the barbarous doctrine of *creating one disease to cure another!* This we can prove they hold, by the best authority.

Mercury also furnishes a fine illustration of Homoeopathy ; for given to a healthy person, it will produce caries of the bones, and other symptoms very similar to syphillis. Bah !

We are glad however to see the use of this poison in this disease, in a great measure superceded by copaiva, a terebinthinate substance. Lobelia, also, which is very successful in this disease, is still more congenial to life

than capavia. Probably the power of lobelia in this case, depends upon the sanatory power which it gives to the body. In confirmation of this idea it is stated in the Gentleman's Medical Pocket Book, that plentiful draughts of barley water or linseed tea will cure the milder forms of this disease.

To conclude this subject, we will illustrate it with an anecdote; which we believe is authentic. At the time when inoculation for small pox was in vogue, a certain man had the operation performed upon his whole family, including a negro in whom the infection did not take. The operation was again repeated but without effect.—Mistrusting from his boasting, that he used some preventive means, he was again inoculated, and watched; when it was discovered that he was in the habit of going into the cellar, and drinking water which stood upon a barrel of tar. Did its preventative power consist in the turpentine, the pyroligneous acid; or both?

THE VAPOR BATH.

This is one of our most powerful agents for restoring action, and removing morbid matter from the system.—The heat produced in the body by cayenne, and other stimulants, depend upon a *mutual* action between the medicine and the system.

Cayenne exhibits no heat to a thermometer; therefore, when the powers of life are very low, it is throwing too great a task upon Nature to undertake to produce a sufficient determination to the surface, by the use of stimulants alone. In fact, in some cases they *cannot* produce the desired effect.

But in the vapor bath we have the most perfect of all modes for conveying heat *independently* into the body.

When the patient commences with the temperature of the vapor pretty low, and there be not much fever, it generally *relaxes* his skin more than it communicates heat, consequently he feels at first a degree of chillness. But the circulating blood becomes gradually warmed and expanded, until every vessel sensibly enlarges with the swelling tide. A thrilling glow runs through the frame, and the subject enjoys, what he calls a "luxury."

On the whole a vapor bath seems to be as much a

tonic as a *relaxant*; therefore if the fever be very high it is recommended by some to sponge with tepid water before applying it. But this is seldom necessary if the temperature be sufficiently low at first; in all cases it should be gradually increased.

Although this bath is the most effectual thing to produce a perspiration upon the dry and burning skin of fever, yet it is also useful to restore tone to the same organ, in the cold sweat of pulmonary consumption. Like lobelia it seems to restore the body from apparently opposite diseases. Possibly it may yet be concluded that this principle is the only test of a perfectly congenial medicinal agent.

Steaming, or the vapor bath is a necessary concomitant to a course of medicine. So important does Thomson regard it that he says, "One operation of steaming will be more effectual in removing disease than four courses without it."

One of the most formidable exciting causes of disease with which we have to contend, is the mercury with which the bodies of thousands of invalids have been infused by the regulars.

Corrosive sublimate when brought into contact with albumen or with the animal body, is rapidly reduced to calomel, during which time it produces its destructive effect as a poison. Calomel, although it holds its remaining portion of chlorine with greater affinity, is gradually reduced to pure quicksilver.

Oliver, in his physiology, states that "Metalic quicksilver has been found in the bones of persons who have been subjected to mercurial frictions; it has been found for example, in a carious skull, and in some other of the bones. Quicksilver has been found, not only in the blood and urine, but in the saliva and sweat of persons who have been severely salivated."

Mercury is very sensible to heat; and its being reduced to that form in the body, may account for its not making its attack immediately upon the vital organs, which lie in the great centre of radiating heat. But like the savage of the wilderness it lurks about the outskirts of the human system and keeps up a predatory

warfare upon the life of its victim. This also accounts for the sensibility of mercurialized people to the changes of the weather. Any increase in the pressure of the atmosphere throws it from its locality, and renders the subject a complete walking barometer. The same reason may account for its having such a specific effect upon the liver, especially the blue pill or black oxide, which is very easily reduced.

Through the liver circulates all the venous blood from the digestive system; consequently, in this organ it would very naturally find a lodgement. But fortunately its reducibility, and volatility, enables us, by aid of the vapor bath, to gradually expel it from the system. Thomson observed, that in steaming his mercurialized patients their faces would sometimes swell; no doubt because they were uncovered and colder than the other parts. Such patients will sometimes become salivated by using the vapor bath, years after they have taken any mercury; especially if they take cold.

Mr. Sunderland, the distinguished pathetist and physiologist of the brain, informed us that he was once called upon by a man who wished to have his health examined by his magnetized clairvoyant. She (the clairvoyant) said the patient was affected with a severe pain in one leg; which was a fact; and although ignorant of the human system and of medicine, she said it was caused by mercury; prescribed the vapor bath; and he recovered. Mercury has an affinity for phosphate of lime, and thus locates itself securely in the bones; therefore the best way to get it out of the system is to keep it out.

The application of cold water to the body, which is sometimes practiced after a vapor bath, has often caused objections by those ignorant of its nature. They drive their ideas from the effect of cold water upon a person sweating from fatigue. But the cases are widely different. In the latter, the heat and power of the system is exhausted too much to react against the cold. In the former there is a large supply of artificial heat actually gone into the system; and the application of cold water closes the pores, and by stopping perspiration, retains

the heat longer and renders the capillaries less liable to become collapsed than without it.

We will now turn our attention to

SPECIFICS

or medicines which operate upon some particular part of the system.

CATHARTICS.—These increase the peristaltic motion and produce fluid discharges. Their operation is the very reverse of emetics, not only their effect upon the alimentary canal, but upon the whole system. Thomson says that they reinforce the disease. When a course of medicine has restored a patient to tolerable health, we have known a cathartic to bring them immediately back to their old condition. The greatest plea which Thomsonians can urge for their use, is the bilious cholic. But in this case, there is such spasmodic contraction of the intestines that most powerful cathartics sometimes refuse to act. We were once called to a man in this disease, where two regular physicians had been in attendance, without producing any passage. We administered the lobelia, which threw up a quantity of castor oil and other physic which he had been taking for the space of 48 hours. We gave more, and produced prostration; after which a cathartic, given by the physician for whom we were acting, operated. Fevers are most generally protracted or made worse by cathartics. The bilious, and morbid matter of which some physicians think they relieve their patients, are often produced by the medicine; and will serve a well person in the same way. However, there are some indications in nature for the use of cathartics. All we wish is to banish them from use as a general treatment; where they have often disgraced the Thomsonian practice.—Let them be confined to their natural place as specifics—used only to remove obstinate obstructions from the bowels—and not then when injections will answer.

We believe the ground formerly occupied by Dr. Thomson on this subject is the correct one. We think his total rejection of them, was, in some measure the result of party spirit, aroused by the opposition of How-

ard of Ohio, who had published a work with pretended improvements, which mainly consisted in the introduction of cathartics. After this Thomson introduced his test resolution before the United States Thomsonian Convention, which divided the society.

The greater reason for the common use of cathartics is that they beguile the patient and make easy work for the doctor. Such, is not only quackery, but imposition. Mark it; the practice of the physician who makes a free use of cathartics, as a general treatment, will be distinguished by bad success.

HEPATICS.—These are medicines which increase the discharge of bile from the liver. Many of the bitters are considered to have this effect. Dandelion, and garden celendine, are regarded as operating very specifically upon the liver.

The shakers say that the former has double the effect of blue pill, so much in vogue with the regulars as a hepatic.

The venous blood from all the digestive system passes through the liver; and the biliary duct, which divides into the almost infinite penicilli, where the bile is produced, is but a continuation of the mucous membrane of the bowels; therefore we may conclude that those agents which will produce the greatest conjoint amount of stimulation and secretion of mucous in the bowels, will be the best hepatics. Cayenne is certainly very excellent for this purpose. However, besides this principle, it seems there are some vegetables which furnish the material of the bile. See Liebig's Animal Chemistry.

DIURETICS.—These promote an excretion of urine from the kidneys. An excessive diuresis as well as catharsis is injurious to the system. A specific for this purpose should only be used when there is a suppression of urine which a general treatment will not remove. We cannot long excite any local action without disturbing the balance of the system. Many are in the habit of carrying off the water of dropsy by diuretics; but they will avail much more, in the end, by using the next class.

SUDORIFICS—but even the use of these are sometimes objectionable; for the articles that properly belong to this class, produce an excessive perspiration without a corresponding action in other parts of the system by simply relaxing the skin. Although the Thomsonians have depended much upon producing a determination to the surface, yet it must not be considered that the cure consists alone in sweating.

There is sometimes such a relaxed state of the skin that the fluid which reaches it, flows rapidly out, producing a cold sweat; for there is not blood enough driven to the surface to keep it warm; and at the same time, in pulmonary consumption, the internal organs will be congested, and profuse expectoration take place. This state must be avoided. Excepting a few cases, where there is evidently much morbid matter, it is a healthy capillary action, and nutrition, instead of sweating, that we wish to produce.—This state is determined by a moist but warm skin, and a returning appetite. Profuse sweating, without this, is very debilitating.

One reason that dover's powder, the famous sweating remedy of the regulars, has done so little curative benefit, is the violation of this law. Potash is the basis of this powder. Perhaps there is no article that will relax so much, and stimulate so little as this kind of alkali. In the form of ley it is the most effectual application that can be used to relieve the vessels, in wounds, bruises, felons &c. Its internal application is questionable. The purest sudorific in use by the Thomsonians, is the white root (*Asclepias tuberosa*.)

EXPECTORANTS.—These promote a discharge of mucus, or pus from the lungs.

We have heard several of our experienced physicians observe that we have been in the habit of giving too many expectorants in pulmonary consumption. But when we recollect that the principal one used is lobelia, we conclude that the mistake does not consist so much in the kind of medicine, as in the idea that expectorants have a curative effect. Thomson justly compares them to a pump in a leaky ship which must be used until the leak is stopped.—The fact is expectoration, or rather a determination to

the lungs is the very thing we should prevent. But when the lungs are obstructed with undue secretion, expectorants, render very important aid in throwing it off.

POISONS.

We cannot dismiss this chapter without making some remarks upon the nature of poisons. Dr. Hooper says, "It is extremely difficult to give a definition of a poison."—There is no wonder that he wishes to clothe the term with ambiguity, for he immediately says, "Poisons in general are only deleterious in certain doses; for the most active, in small doses, form the most valuable medicines."

We were recently conversing with an intelligent M. D., who stated that the beneficial or poisonous nature of an article was entirely determined by the quantity or some other circumstance connected with it—that bread might be converted into a poison—that arsenic, although it destroys life, might be made to save hundreds of children from diseased mesenteric glands, were it not for the prejudice against it—that carbonic acid, often an element of our food and drink, in small quantity, is a fatal poison in a larger quantity. This is the current reasoning of the faculty on this subject. But carbonic acid is no more a poison than water; both are products of combustion, not capable of being decomposed by the vital powers—both abound in the system; and only destroy life, when the body is immersed in them.

With the regulars, bread and water, mercury and arsenic, are confounded together as poisons. They give so much latitude to the term as to entirely destroy its worth. If every thing is a poison, we shall, after all, for practical purposes, have to go to work and distinguish them in good and bad poisons.

But what is the common sense of the word poison?—That which tends to produce death independent of the quantity, or manner of applying it. This includes all of the inorganic elements not composing a part of our bodies; and which, as we have before shown, constitutes a grand natural distinction of poisons.

But it may be objected that the ultimate elements of our bodies may destroy life, for instance the alkalies. But

that depends, in all cases, upon the quantity given, or the manner of applying them. Their destroying power is not the legitimate object of their relation to the human body, they are not poisons.

We may apply the same distinction to vegetable substances. Many of the essential oils, in small quantity, are very useful and perfectly harmless, but increased to a certain amount, though still small, they produce death. Perhaps prussiac acid should be included in this class of agents. This article, in the kernel of the peach, constitutes the basis of Thomsons No. 5, or strengthening syrup; but when in a pure state a very small quantity will produce sudden death, or rather suspended animation; for it appears that a dash of cold water, or a shock of electricity will recover a person parralyzed by it. It is often procured from the vegetable kingdom to flavor cake. We do not think it should be considered a radical poison.—On the other hand, the vegetable narcotics, so much used by the regulars, produce deleterious effects in any quantity; and are justly considered poisons.

THERAPEUTIC AGENTS OF THE REGULARS—BY THEMSELVES

Arsenic.

An arseniate of of pollassa was extensively used by the late Dr. Fowler, of New York. He used it in intermittent and remittent fever; periodical head ache, nervous, and other disorders. Externally it has been used as a caustic to extirpate cancers. It has been more lately used as an alterative in chronic rheumatism.

The effects of arsenic have been graphically described by Dr. Black.

“First—sickness and distress at the stomach, soon followed by thirst, and burning heat in the bowels. Then come on violent vomiting, and severe colic, pains and excessive and painful purging. This brings on fainting, with cold sweats, and other signs of great debility. To this succeed painful cramps, and contractions of the legs and thighs, and extreme weakness and death. Similar results have followed the incautious sprinkling of schirrus ulcers with powdered arsenic—*Dr. Hooper—Med. Dic.*

Antimony.

"Antimony is so called because it slew certain monks. The evils inflicted by the indiscriminate use of antimony, are far more extensively known than formerly. It happens that a child is taken with the whooping cough, but runs about, being in other respects, perfectly well. A neighboring physician is sent for. He prescribes tartrate of antimony, and sickens the child every four or six hours. It becomes pale and prostrate, and lies in his mother's lap. The mucous membrane of the stomach becomes excited; general irritation takes place; the bowels and the brain become implicated in the affection, and in a fit of convulsions, it dies!! It is a notorious fact that whooping cough is far more fatal in London than in the country; and I believe this arises from the very free use of antimonials in London. Mercury, Opium, and Antimony, are in reality poisons."—*Dr. Armstrong.*

Copper.

"Verdigris, and other preparations of copper, act as violent poisons, when introduced in very small quantities into the stomach of animals. Death is commonly preceded by very decided nervous disorders; such as convulsive movements, tetanus, general insensibility, or palsy of the lower extremities."—*Hooper.*

"But although copper be thus dangerous, some preparations of it are, in certain cases, used with great advantage, both externally and internally."—*American Dispensatory.*

Lead.

"Its effects on the body, are emaciation, violent colics, paralysis, tremors, and contractions of the limbs."—*American Dispensatory.*

Mercury.

"Mercury produces pains like those of rheumatism, and nodes of a scrofulous nature. Mercury occasionally attacks the bowels, and causes violent purging, even of blood. Mercury, when it falls on the mouth, sometimes produces inflammation, which now and then terminates in mortification!

Occasionally, mercury acts on the system, quite unconnected with its agency as a remedy, neither proportionate to its action on the mouth, nor actual quantity of the mineral absorbed. It is characterised by great depression of strength, a sense of anxiety about the breast, irregularity of the heart, frequent sighing, trembling, a small, quick, and sometimes intermittent pulse, occasional vomiting, and a pale contracted countenance."—*Hooper*.

"I once saw a lady who had been for several months undergoing courses of mercury. The blue pill was continued to correct the stools, till she was reduced to a skeleton, and was so nervous that an angry look made her shed tears, and if the door were suddenly opened, she started, and was excessively agitated. The administration of mercury, day after day, with a cool skin is one of the most destructive practices with which I am acquainted."—*Armstrong*.

Opium.

"The symptoms of poisoning by opium, begin with giddiness and stupor. The stupor rapidly increasing, the person soon becomes motionless, and insensible to external impressions; he breathes very slowly, generally lies quite still, with the eyes shut and pupils contracted. As the poisoning advances, the features become ghastly, the pulse feeble and imperceptible, the muscles excessively relaxed, and unless assistance is speedily procured, death ensues."—*Dr. Christison*.

FINIS.

Conclusion of Part II.

It is hoped the indulgent reader will not rashly condemn the *truth* on account of the *error* that may be found in the preceding rapid views of medical science. A work which, like this, goes to press nearly as fast as written, justly claims an apology for not exhibiting that revision common to more mature writings. Perhaps our fondness for system has caused us, in some instances to transgress the laws of inductive philosophy. But we hope all will reflect that it is much easier to find faults than to mend them.

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AGREEMENT.

The subscriber agrees to give, when applied for, to all who purchase this work, any information that shall be necessary for a complete understanding in preparing and using medicines used in his practice. He also will give them council gratuitously in any case of disease, when applied to at his office or by letter, containing the symptoms, age &c., of the patient, post paid, and directed to East Bennington, Vermont.

SILAS WILCOX.

OBITUARY.—Since this work was put to press Dr. Samuel Thomson, the founder of this system, died! The fame of his genius will descend the stream of time until disease is forgotten in the progress of man.

PART III.

Descriptions of Disease.

CHAP. I.

NOSOLOGY AND INDEX.

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ACUTE OR TRANSIENT DISEASE.

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CHAP. II.

Distinguishing Symptoms.

THE PULSE.

This is the beating of the arteries. It corresponds the motion of the heart. At birth, the number of beats are 135 in a minute ; at 1 year 125 ; at 2 years 105 ; at 7 88 ; at 14 years 80 ; at adult age, 70 ; at old age 60. In some persons, the natural standard is 80, or 90 ; in others. 50 or 60. It is 5 or 6 beats quicker in females.— Disease both increases and lessens the number of beats and their force. Quickness and hardness of the pulse, with a hot dry skin, attends fever. A quick small pulse with coldness of the skin, attends a congestion of blood upon the centre. A slow pulse attends congestion of the brain. A quick pulse without fever, is a sign of debility ; when it is over 120 in chronic disease, the case is bad. A quick corded pulse attends inflammation of serous membranes. In inflammation of the mucous membranes, such as the inner membrane of the bronchia, or bowels, it is comparatively soft. A small quick pulse, with a hot dry skin attends the typhus, or putrid state of the system.

—————00—————

THE TONGUE.

A white fur on the tongue attends simple fever and inflammation. Yellowness of the tongue attends a derangement of the liver, and is common to bilious, and typhus fevers. A tongue vividly red on the tip and edges, or down the centre, or over the whole surface, attends inflammation of the mucous membrane of the stomach or bowels.— A white velvety tongue, attends mental diseases, A tongue red at the tip, becoming brown, dry and glazed attends typhus state,

CHAP. III.

FEVERS.

SIMPLE INFLAMMATORY FEVER.

SYMPTOMS.—This disease commences with alternate chills and fever—skin hot—eyes red—pulse quick, strong, full, and regular—great thirst for cold water—tongue white—urine high colored and small in quantity—bowels costive—breathing quick—great determination of blood to the head—great aversion to noise—and, sometimes, slight delirium.

FAVORABLE.—Slight hæmorrhage from the nose—general perspiration—pale urine, turbid when cool—pulse returning to its natural standard—and the surface returning to its natural temperature.

UNFAVORABLE.—Excessive delirium—profuse discharge of limpid urine, occurring suddenly—profuse watery discharges from the bowels—copious sweat without, sedimentous urine.

CAUSES.—Cold, or a sudden check of perspiration—violent exercise—Intemperance—and sudden suppression of accustomed evacuations.

Regular Treatment.—Bleed and repeat every 6 or 12 hours until relief is obtained—blister—give salts—Calomel—dovers powder—salt petre, antimony, &c., &c.

Natural Treatment.—In the management of this fever the great object is to open the pores of the skin, and relieve the vessels of the retained perspirable fluid.

To carry out this indication, place the patient in a chair near a fire; put his feet in hot water; cover him with a blanket; give him a cup of warm composition, once in ten or fifteen minutes, continue to add hot water to the vessel in which his feet are placed, increasing it in temperature as much as he can bear, until a free perspiration is produced. Then put him in bed; put a steaming stone to his feet and give him a thorough operation of lobelia as described under *course of medicine*, No. 1, hereafter. If the bowels be very costive, they should, first of all, be relieved by an enema; and, in any case, be daily moved by the same means, if necessary. If this should not be sufficient to arrest the disease, the lobelia should be repeated in broken doses, so as to keep the stomach in a state of nausea. It may be administered in the following form. One teaspoonful of the powder to two thirds of a tea cup full of lady's slipper, or scull cap tea. Of this, give a table spoonful once in two hours; more or less according to the age and strength of the patient; accompanied with a liberal use of the composition, or stimulating tea. If the skin be dry and hot it should be frequently sponged with weak ley, salerates water, or soap suds.

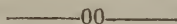
If, under this treatment, the disease does not rapidly subside, the course of medicine should be repeated within twenty four hours.

If the thirst of the patient be very great, he may make a free use of common herb tea, crust coffee or slippery elm; and if the pores be well kept open, small draughts of cold water will do no harm if the patient be very urgent for it. This treatment should be persevered in until all febrile symptoms disappear.

DIET.—This should be very light, at least for the first day or two; consisting of milk porridge, rice &c. In this as in all other diseases, food should be given at regular hours; whether fluid or not; the violation of this rule has often destroyed the regular appetite of the patient.

Allow us here to remark that too much dependence cannot be placed upon the effect of Lobelia in this and all other febrile diseases. It operates not only as an emetic but as a stimulant—Antispasmodic—Diaphoretic and Sudorific. A worthy M. D. Professor of the theory and practice of

medicine in the Southern botanico medical college says, "the perfect *revolutionizing* power of Lobelia, in a great variety of diseases cannot be appreciated, but by those who are acquainted with its operation. These assertions are not the offspring of a heated imagination, or ardent enthusiasm—but the plain sober facts of every days observation and familiar as household words, with the Botanic fraternity. Were I to make an appeal for the truth of my language, the united voices of every Thomsonian in the land would give the same reply, until they made the very *echo's head ache!*"



SYNOCHUS, OR COMMON CONTINUED FEVER.

This fever is intermediate between the inflammatory and typhus, combining the milder forms of each; and is the most common grade of continued fever that occurs. This disease is found in several forms; sometimes very much like the inflammatory excepting that the patient has less strength; sometimes commencing with a character more markedly typhus or nervous; in which we have the following

SYMPTOMS.—Commencing with a cold stage, characterized by lassitude—restlessness—confusion of mind—feebleness and quickness of pulse—and disgust at food. Then comes flushes of heat;—then a confirmed state of heat and dryness upon the surface, with the pulse more active—face flushed—a dull heavy or throbbing pain in the head—and intolerance of light and sound.

The tongue is at first white, becoming dry and dark brown as the disease advances; the bowels are torpid—the stools soft, and often clay colored. The urine is generally red, sometimes pale, and wholly without sediment. If the disease is suffered to go on, these symptoms often continue for five or six days, excepting a slight remission in the morning and an increase at night, sometimes with slight delirium.

FAVORABLE.—The tongue becomes clean and moist—pulse and fever moderate—the surface moist, and the appetite and attention gradually returns.

UNFAVORABLE.—Stupor and constant delirium—dilated pupils of the eye—sordes about the teeth—hurried breathing—twitching of the muscles, picking at the bed clothes—and sinking of the pulse.

CAUSES.—Most commonly application of cold to the body after debility has been produced by great fatigue—loss of sleep—close application to study—gloom and anxiety—intemperate indulgences—blood letting—and drastic purges.

Regular treatment.—‘By *bleeding* unnecessarily at the commencement of this fever, such a degree of weakness may be induced, as, added to the depression of strength, which arises in its progress, might produce symptoms of putrefaction in the second or third week of the disease, so as to prove fatal!! By neglecting to *bleed*, however, when the pulse is full, hard, and quick * * * we shall commit a dangerous error, and endanger the life of the patient.

‘If great heat, with much thirst prevails, refrigerants may be used, with headache, the most useful of this class is *nitre*.

* * * *Antimonials* given in small nouseating doses. * * * For pains in the head, stupor or delerium, the application of a *blzster* near the part affected will be proper. * * *

Where there is any coldness of the extremities, *blisters* to the inside of the legs.—

* * * Where there is mostly weakness and irritability, *opium* in small doses, and peruvian bark.’—*Thomas’ Practice*.

Natural treatment.—In most cases of this class of fever the treatment should be at first very much like that prescribed in inflammatory fever, depending mostly on courses of medicine, excepting that less quantities may produce the desired effect; for in these cases the strength of the patient is weaker; and also, as the disease is more chronic, we must expect a longer application of the same means.—Besides the stomach and bowels are more obstructed with

canker, which requires a more thorough application of astringents.

If wakefulness, and other nervous symptoms occur, which is generally the case, take nerve powder, bayberry and cayenne, equal parts; infuse from half to a teaspoonful in a cup of hot water, add milk and sugar; give once in two hours; at bed time increasing the quantity of nerve.

To keep up a gentle perspiration, especially, on days when no course of medicine is given, two or three stomach pills may be given once in four hours. Keep the bowels open by the use of injections, once or twice a day—composed of composition, nerve powder a teaspoonful each, and green lobelia from a fourth to a half, infused in a sufficient quantity of water, with a little molasses or sugar.

If typhus symptoms, which seldom occur before the seventh or ninth day, should make their appearance, and known by increased stupor and delirium—pulse becoming smaller and quicker, and the stools very fetid, we must then place more dependance upon antiseptics,—make a strong decoction of bayberry, sumac, or raspberry; to a cup of the tea put in a teaspoonful of nerve powder, half a teaspoonful of pulverized myrrh, from a fourth to a half of cayenne; give half a cup full every one or two hours as the case may seem to require.

A decoction of the same, with a teaspoonful of third preparation, or a half a teaspoonful of green lobelia, may be given for an injection every six or twelve hours, according to the case. The stomach pills should be continued as before described.

Particular attention must be given to keep the blood in the extremities, by putting steaming stones to the feet; and by sponging the surface several times a day with salt and vinegar and water, followed by rubbing with a dry towel. If there be great determination to the head, cloths wet in cold water may be applied. If the extremities become cold, make a thorough application of the rheumatic, or stimulating linament.

When the febrile symptoms are well abated, the patient should be put upon a course of tonics or spice bitters, poplar,

balmony or golden seal, given three or four times a day before eating.

DIET &c.—The food, as in all fevers should be light, but we must not, as some do, keep the patient a number of days on nothing but a starch diet;—this is very proper in the afternoon, but in the morning he should have some chicken or beef soup, cleared from every particle of oil. His room should be frequently aired, but his body kept warm with light and porous bedding, which should be often changed and cleansed.

This kind of fever, under a judicious Thomsonian treatment; where cathartics are avoided, seldom assumes the typhus character; and when they have first occurred under the regular practice, they will generally yield in the course of a week by the application of our remedies; but if the friends wait till the regular gives up the case, it frequently defies all aid, and the patient dies.

As an instance, this fever prevailed in 1833, in Starksboro Addison Co. Vt. Out of some thirty five patients the regulars lost twenty three, mostly heads of families, the fever running from fourteen to ninety days. The M. D's. of the town often held consultations with others from various parts of the county, devising various modes of applying mercury, antimony, nitre, opium, blood-letting, even arsenic, and various other poisons with which their murderous pharmacopeia furnished them; and the very natural result was, death! death!! death!!!

Although we were then residing about thirty five miles distant, we were called to practice in the town, and out of seventeen patients we lost not one; the disease rapidly giving way before the warming, cleansing, blood arousing, life restoring Thomsonian remedies, terminating in from three to seven days; and in only one case did it continue till the fourteenth.

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TYPHUS, OR LOW NERVOUS FEVER.

SYMPTOMS.—This disease is frequently several days gradually encroaching upon the patients health before he is aware of its character.

It commences with a general languor—dejection of spirits—loss of appetite—weakness—watchfulness—deep sighing—pain in the back and head.

Succeeded by a quick low pulse,—sometimes intermitting—tongue dry and brown—giddiness—nausea and occasional vomiting—urine pale—breathing difficult—and particularly stupor and delirium.

This disease sometimes appears in a more violent form termed *Malignant typhus*, characterized by spots upon the surface of a red, purple, or black color—fetid stools—and hæmorrhages from the mouth, eyes, nose—teeth encrusted with a dark brown sordes. When it occurs from contagion it is distinguished from common typhus by these symptoms coming on much more suddenly. The blood when drawn appears dissolved.

FAVORABLE.—If on the seventh, ninth or tenth day the tongue become moist—plentiful spitting—bowels loose—skin moist or a suppuration in one or both ears—pustules on the lips and nose, returning appetite.

UNFAVORABLE.—Excessive diarrhœa—cold wasting sweat—frequent fainting—extremities cold—slow fluttering pulse—starting of the tendons—loss of sight and hearing—and involuntary discharge of stool and urine.

CAUSES.—It is often caused by bad diet—excessive indulgences—want of cleanliness—the effluvia from decaying animal and vegetable matter—sometimes by contagion on exposure to the sick; this is particularly so in its malignant form, in which character it sometimes appears as a pestilence in prisons, camps, and cities.

“Sometimes frequent salivation—too free use of purgative medicines—and whatever impoverishes the blood [Blood letting of course.]—*Buchan M. D.*

Regular treatment.—“First emetics, for cerebral congestion, cupping the temples in delicate constitutions; but in plethoric habits, six or eight ounces of blood drawn from the arm or juglar vein—cold affusions—blistering, one of the chief things to be depended on. Move the bowels with rhubarb, senna, jalap and mercury. For dangerous symptoms, musk, ether, camphor, and opium. For debility, peruvian bark and wine.—*Buchan M. D.*

Natural treatment.—In the commencement of this fever, if the patient has sufficient strength to set up, we may endeavour to arrest it by courses of medicine no. 2 daily administered. If he is too weak for this, emetics must be given every 12 or 24 hours; with steaming stones to the feet and sides, if the skin be dry or the extremities cold.—The skin must never be suffered to become dry; although we should avoid profuse perspiration, excepting in cases where the surface has been dry for some time, when it should be kept very free for several hours. Courses of medicine should be administered throughout the disease, but repeated in the latter part only every second or third day; abating with the convalescence of the patient. Frequently bathe the surface, alternating with weak ley, and salt and vinegar and water;—and the extremities, if cold with stimulating linament. As a general dose, infuse a teaspoonful of Diaphoretic powder, or if not at hand, the fever powder (see *Materia Medica*) in a teacupful of nerve powder or scull cap tea; and give every 3 hours. Keep the bowels moved daily with enemas.

If bad symptoms occur, we must make a more vigorous application of stimulants and antiseptics—make an enema of milk-weed root, or tar water, and add a table spoonful of some of the canker medicines; put into the syringe from a half to a table spoonful of third preparation; and if it passes soon, repeat it; also give by mouth a strong tea of white root with half a teaspoonful of cayenne and myrrh each. Repeat this at suitable intervals as the case may require. If there be much determination to the head and delirium, apply steaming stones to the feet, also rubbing them with stimulating linament, or vinegar and cayenne; and apply wet cloths to the head. The bowels may be fomented or rubbed with No. 6. When the patient becomes convalescent use the spice or wine bitters 3 or 4 times a day; or Thomson's No. 5 syrup.

Regimen.—The diet may be very much the same as that in synochus fever, excepting that more care must be taken not to give the patient solid food.

If the bowels are costive small quantities of indian gruel may be servicable in correcting them, if it agrees with the stomach. Sour apples roasted, the juce of cranberries,

lemonade &c., may be used as a drink. Particular attention must be paid to cleanliness—the bedding often changed—the night vessel, as often as used, washed, sprinkled with chlorid of lime, or common fresh lime, and returned beneath the bed. The room may be fumigated daily with a little fresh tar dropped upon a shovel full of hot coals. This will be beneficial to the patient, and agreeable rather than otherwise. The house must be often aired; remember it is one thing to keep a patient warm and another thing to give him pure air upon which vital warmth depends. The following extracts will convince all of its importance. “A petechia” [one of the spots which occur in typhus] “is a little bloody point under the skin, irregular in shape. It is generally nothing more than exudation of blood from the extremities of the capillaries. It varies in color, sometimes it is very faint; sometimes vividly red; sometimes purpleish; sometimes dark red;—and the darker they are the worse. Petechia arise almost always, when they do exist, in persons who breathe a close atmosphere.—They occur, for example, in persons who reside in cellars; while those who live in garrets, where there are plenty of broken panes, and where there is a tolerable supply of fresh air, are hardly ever attacked by them.—If a person covered with petechia, lying in bed in a close apartment, be carried into fresh air, it is surprising how rapidly they van’ish.”—*Dr. Armstrong.*

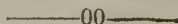
The following extract not only shows the importance of pure air but the lamentable blunders of the regulars. “In the Lying In Hospital of Dublin 2,944 infants, out of 7,650, died in the year 1782, within the first fortnight from their birth. They almost all expired in convulsions; many foamed at the mouth; their thumbs were down into the palms of their hands; their jaws were locked; their faces were swelled; and they presented in a greater or less degree every appearance of suffocation!”

This last circumstance *at last*, produced an enquiring whether the rooms were not insufficiently ventilated.—The apartments of the Hospital were rendered more airy; and the consequence has been, that the propor-

tion of deaths, according to the registers of succeeding years, is diminished from *three to one!*!"

Here then, were 1,962 helpless infants sacrificed yearly in the city of Dublin, to the violation of physiological law; and that too, under the eyes of a "*learned!*" faculty. Well might Armstrong exclaim, "There is a great deal of ignorance in learning." Physicians very often are, what Milton calls

'Deep versed in books, but shallow in themselves.'



INTERMITTENT, OR AGUE AND FEVER.

This fever has several kinds, name from the length of time between the paroxysms. 1st. Quotidian, occurring every 24 hours. 2nd. Tertian, occurring every 48 hours. 3rd. Quartan, occurring every 72 hours.

SYMPTOMS.—The paroxysms commence with yawning—stretching—and uneasiness; soon succeeded by slight chills, ending in violent shivering and shaking of the whole body—great thirst and sometimes vomiting. This is called the *cold* stage. The pulse then rises—the skin becomes hot,—pain in the head—tongue white—and all the marks of fever. This is called the *hot* stage. The pores then open, and profuse perspiration takes place which gradually subsides and leaves the patient nearly natural. This is called the *sweating* stage. In the intervals the patient exhibits more or less weakness, and a pale sallow complexion.

FAVORABLE.—This disease seldom terminates fatally in temperate latitudes. The paroxysms delaying their usual time—scabby eruptions about the mouth and nostrils, are good signs.

UNFAVORABLE.—The paroxysms anticipating their usual time, in which case it sometimes runs into remittent or continued fever.

In warm climates typhus symptoms sometimes occur with intermittents, where they are more apt to terminate fatally. And in our own latitude, where there is great debility or a predisposition to apoplexy in the patient,

death sometimes takes in the cold stage. [Therefore fever must be a friend.]

Causes.—Miasma, or foul air from swamps and decaying vegetable matter.

Regular Treatment.—‘First attack—take 50 or 60 drops of laudanum and cover warmly. In the hot stage, if inflammatory symptoms appear, *bleed!* and open the bowels with senna and salts. After this quinine mixture.’ “If the disease resists this treatment, try 6 drops of Fowler’s solution of arsenic!!! three times a day with peruvian bark, gradually increasing it to 9 or 10 drops at each dose. If the liver and spleen become affected resource must be had to *Mercury!*!”—*Gentleman’s Medical Pocket Book.*

Natural treatment.—The paroxysms of this fever may be often arrested by the timely use of the vapor bath applied about a half an hour before the commencement of the chills accompanied with a free use of stimulants composition, cayenne or No. 6. In all cases we should give a course of medicine at the recurrence of every paroxysm, giving the bath before the cold stage, and the emetic after the hot stage. After the subsiding of the paroxysm, and the system has been thoroughly cleansed, we may give the *ague powder*, from 3 to 7 times a day.

Regimen.—The patient should take nothing but liquid food for 6 hours previous to a paroxysm, for solid food will not then digest. He should take no grease; and avoid much exertion.



REMITTENT, OR BILIOUS FEVER.

This fever has various grades, closely allied to ague and fever on one hand, and yellow fever on the other.

It is most common, like all other bilious fevers, in the Southern and Western States. A bilious character sometimes attends the common synochus fever, which has received the name of bilious fever in the Middle and Eastern States.

SYMPTOMS.—Commencing with languor—drowsiness—pains in the back and head—chills and flushes of heat—at length, great heat and dryness of the skin, with severe pains in the head back and limbs—tongue at first white, becoming brown—vomiting of bilious matter—yellowness of the eyes and skin—pulse quick, hard and moderately full—and particularly characterized by slight remissions of the fever, mostly in the forenoon.

FAVORABLE.—Long remissions of the fever—returning of healthy functions.

UNFAVORABLE.—Short and almost imperceptible remissions—soreness and swelling of the abdomen—watery and offensive discharges from the bowels—and continued delirium.

Causes.—Miasma—or the decaying of some organ in the body.

Regular Treatment.—“Bleed the patient freely and repeat the operation if the pulse seems to require it. The next step is to cleanse the stomach with an emetic, [*anti-mony of course*] which having operated, open the bowels with *calomel*! *The lancet!!! and calomel!!! are the two sheet anchors in this disease, and irresolution or timidity in the employment of them, may cost the sufferer his life* [ha! ha!!! ha!!!]

From 20 to 30 grains! of calomel combined with a portion or two of jalap, may be given in molasses and repeated until copious evacuations are produced. If the pain in the head be very great, *shave it and apply a blister!!!* If, however, in spite of all endeavors to the contrary, the complaint seems advancing, *endeavor to bring on salivation!!! as quick as possible.* [Tell it not in Gath.—Publish it not in the streets of Askelon.]—*Gentlemen's Medical Pocket Book.*

Natural treatment.—The principal indication in this disease is to remove morbid matter from the body, and restore the functions of the digestive system. Give courses of medicine No. 3, every 12, 24 or 48 hours according to the case until the fever has abated. During this time wash the surface 3 times a day with weak ley. Give composition, white root and cayenne combined every hour; and 2 or 3 stomach pills every two hours during the afternoon and

night ; or at times when there is no remission of fever. If the bowels be costive, give from half to a teaspoonful of bitter root and cayenne each, mixed in molasses or cold water, at night, assisted by injections in the morning ; or use the bile pills.

If the disease commences in a mild form, the practitioner, or nurse may use the course of medicine No. 1, or 2 at their option. If there be pain or swelling about the region of the stomach, the extract, or syrup of dandelion may be used to act upon the liver ; and foment with smart weed.

When the patient is convalescent, tone and strengthen with golden seal, or the spice bitters as usual.

Regimen.—Let the diet be purely vegetable and very light for a few days, consisting of gruel rice &c., afterward use butter milk. In this and in all other diseases, endeavor to have the meals taken at regular hours. Try to have the patient sleep mostly at night by the means of quietness and the use of nervines. Keep the air pure ; and let but few be in the room.



YELLOW FEVER.

SYMPTOMS.—Commencing with sudden giddiness—pain in the back and extremities—slight chills and nausea. After some hours a sudden increase of heat—eyes red—extreme headache—great thirst—sense of weight and tension at the stomach. In about 24 hours, bilious vomiting—heat and tenderness of the stomach—and delirium.—Then an almost entire remission of symptoms—returning in a few hours with greater violence—vomiting of black matter resembling coffee grounds—and yellowness of the face and neck.

FAVORABLE.—A settled state of the stomach—copious perspiration, with warmth of the extremities—prickly heat on the surface and sound sleep.

UNFAVORABLE.—Weak irregular pulse—dilated pupils—stupor—black and fetid stools—petechia—and hic-cough.

Cause.—Disengagement of miasma under a high heat.

Regular Treatment.—Extremely irregular. Dr. Rush practiced the antiphillogistic—bleeding plan, and lost 4 out of 6 in his own family, and a similar proportion abroad.—“Bleeding cannot be resorted to with advantage.”—*Dr. Thomas.*

Natural Treatment.—Very much the same as bilious fever. At the first attack we must make a vigorous effort to remove morbid matter from every outlet, particularly the surface, by courses of medicine, injections and a careful use of laxatives, diuretics, and hepatics; for the last use dandelion freely. Vinegar tincture of lobelia has been known to produce the desired effect in this disease when no other would; and considering the good effect which acids always produce upon bilious fevers, it had better be preferred. When convalescent, give tonics and the jaundice bitters.

Regimen.—Use a very light indian gruel and lemonade in the first stage; a milk porridge or unbolted wheat gruel in the second. Fresh buttermilk may be used; it possesses a superior virtue in bilious affections; depending no doubt on the oxygen it has absorbed; which Liebig holds is deficient in these diseases. “Dr. Nardin [of Charleston] declared that cases he treated with botanic remedies yielded as readily as any acute disease. He lost none.”—*A. N. Worthy; M. D.*

CHAP. IV.

INFLAMMATIONS.

INFLAMMATION OF THE BRAIN.

SYMPTOMS.—Great determination of blood to the head, with a fixed pain—feet cold—eyes incapable of bearing the light—sparkling—pupils contracted or varying, bowels torpid. pulse hard quick and corded—tongue at first white, or fiery red, then yellow or brown, picking at flocks—and often raving delirium.

FAVORABLE.—Abatement of the fetid symptoms—hemorrhage from the nose—remembering dreams—and delirium relieved by sleep.

UNFAVORABLE.—Grinding of the teeth—ash colored stools—hemorrhage from the bowels, starting of the tendons, convulsions, cold sweats—stupor—and inability—to put out the tongue. In children it often results in dropsy of the brain, known by a dilated pupil.

Causes.—Violent fits of passion—intense study, blows on the head—excessive venery—spiritous liquors—long exposure of the head to the sun. In children it is often caused by long exposure to cold, or irritation of the intestinal canal. It frequently arises as an effect of fever or the inflammation of some other organ, when it generally terminates fatally.

Regular Treatment.—‘Bleeding the patient as largely as his strength will permit—from the temporal artery or

juglar vein—Calomel and jalap—blisters to the back of the neck, &c. &c.—*Dr. Hooper.*

Natural Treatment.—'This is a very rapid disease and if not promptly treated may soon become past cure. The practical indications are to increase the circulation in the lower extremities by hot applications; to lessen the determination to the head by cold; and to restore the functions of the bowels. Commence with an injection made of a teaspoonful of composition and nerve powder each, and half a teaspoonful of brown lobelia. Then put the patient's feet in hot water, and apply the vapor bath. In many cases it may be advisable to apply the steam only below the waist. For this purpose, seat the patient upon a stool, or chair without a back; take the portable bath hereafter described, open the top of the curtain and bring it down to the waist and tie; or if not at hand pin blankets about the waist. During this operation, keep the head covered with cloths wet in ice water; at the same time giving freely of composition. This bath should be applied a longer time than usual; but regulate it by the patient's feelings; then put him in bed; thoroughly rub his feet with stimulating liniment; put a steaming stone to them, and keep the wet cloths on his head, changing them as often as they become warm.

We must next endeavor to get an emetic operation by the repeated injections; containing from half to a teaspoonful of brown lobelia (not the substance;) if this does not operate give a portion or two by mouth washed down with soda, or salæratuſ water. If this produces prostration, so much the better. The sighing breath, nervous agitation, great relaxation, or insensibility which sometimes attend this state should cause no alarm; give strong composition, keep the extremities warm; and in from 5 to 8 hours the patient will vomit and be greatly relieved. Prostration by lobelia always produces transient, and often permanent relief from delirium in this disease and generally for a time restore even the maniac to a state of sanity.

The room should be kept warm, and the patient be shielded with a blanket when up at stool. During steaming, or if prostration occur, the air in the room should be kept fresh.

For an intermediate treatment, give a cup full of stimulating tea once in one or two hours. If the bowels be at all costive, give 3 or 4 of the bile pills; these will cause a movement without determining the fluids inward. If the affection of the head is not sufficiently relieved in 12 hours, repeat the above course. When convalescent give poplar tea.

“Keep the feet warm, head cool, and bowels open”—*Abernethy’s golden rule of medicine.*

EXAMPLE.—We were called to attend, a few months since, Mr. Bottom of Shaftsbury, Vt., who was affected with this fearful disease, which had arisen sympathetically from pleurisy of about a weeks standing. We found him with violent delirium, constantly picking at the bed clothes, tongue black and dry, bloating of the bowels and obstinate costiveness. We placed our chief reliance upon lobelia, giving by enema and mouth 6 teaspoonfuls of the brown in the course of an hour and a half; also about half the quantity of cayenne, with bathing the feet in hot water and steaming. The result was complete prostration, when in about 7 hours the patient vomited large quantities of very foul matter, became perfectly rational, and rapidly recovered.

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PLEURISY.

This is an inflammation of the *pleura*, a membrane lining the inside of the chest.

SYMPTOMS.—Chills—followed by heat—thirst—acute pain in the side—hard dry cough—painful stictch in taking a full breath—difficulty of lying on the affected side—pulse quick, hard, and vibrating—spittle at first thin, becoming thicker and often streaked with blood.

FAVORABLE.—Gradual abatement of the pulse and fever—breathing easier—and copious expectoration.

UNFAVORABLE.—After violent symptoms, a sudden cessation of pain—change of countenance—and sinking of the pulse.

Causes.—Exposure to cold—wetting the feet—severe exertions—stoppage of some evacuation.

Regular Treatment.—Copious abstraction of blood from the arm; immediately afterward 15 or 20 leeches to the chest; followed by cupping glasses. If pain continue, immediately renew the leeches—and cupping glasses again applied as soon as the leeches have fallen off. If the symptoms all continue after the first bleeding, open a vein a second and even a third time during the first two days. Give tartrate of antimony as a counter stimulant. If the disease still continues apply a large blister to the side. If the patient is now very weak [should'nt wonder] apply other blisters to each leg. Injections of antimony and epicac;—if effusion has taken place, small bleeding, if not too weak—emetics [antimony of course.] blisters and seatons to several parts of the body at once. Lastly, when every thing else has failed, cut an opening into the side.—*Martinet's Therapeutics.*

Natural Treatment.—This disease generally attacks people of a strong habit, and requires very decided and active treatment.

A thorough course of medicine should be given. Bathe the side with stimulating lineament, No. 6, or third preparation; then apply a fomentation of smartweed, hops or boiled oats; accompanied with steaming stones to the sides and feet.

Infuse a teaspoonful of composition and pleurisy root each in a cup of hot water and give every 2 or 3 hours; also between these times give a teaspoonful of the cough or fever powder, in a tea of pennyroyal, sage, or smartweed. Instead of the cough powder, frequent doses of the vinegar tincture of lobelia be given, in quantity sufficient to produce constant nausea. Frequent steaming is highly necessary to equalize circulation, and determine the blood to the surface. If the pain and difficulty of breathing still continue, we must repeat the courses of medicine until we have gained the victory.

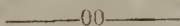
The perspiration should by no means be allowed to subside in this disease until the patient is safe.

The surface should be rubbed over twice or three times a day with warm weak ley or salærated water; taking care to keep the patient covered at the same time. For drink make a free use of slippery elm or flaxseed tea; these will

serve to loosen the phlegm and promote expectoration.—When recovering the patient may take 3 or 4 times a day of the antidyspeptic powder, or spice bitters, as a gentle restorative.

EXAMPLE.—A man residing with Mr. Witherell of North Bennington, Vt., was severely attacked with pleurisy;—employed a regular, Dr. M—, who resorted to copious bleeding and the other usual remedies of the old school, without removing the disease. We were called on the sixth day, and found the patient laboring under a severe pain of the side, with much difficulty of breathing, and extremely weak from the united attack of the disease and the doctor. We ordered 2 stomach pills every 2 hours, and a dose of composition and pleurisy root every 2 hours alternately; with steaming stones to his sides and feet.

This treatment operated as an emetic and thorough diaphoretic. On our third visit we found the patient out of doors, and nearly well. *“The abstraction of blood sometimes seems to aggravate the pleurisy.”*—Martinel.



INFLAMMATION OF THE LUNGS.

SYMPTOMS.—Very difficult breathing—oppression of the chest—dull pain in some part of the breast—cough—pulse frequent, full and vibrating—tongue white, and other symptoms of inflammatory fever. It is sometimes complicated with pleurisy, and has very similar symptoms excepting the pain is more obtuse.

FAVORABLE.—Mild sweats—copious urine, with a sediment—hemorrhage from the nose—and particularly a free expectoration of a white, or yellow mucus.

UNFAVORABLE.—High fever, attended with delirium—acute pain—dry cough—expectoration dark or black—irregular pulse—purple lips and livid countenance—sudden cessation of pain, and chilliness. The last symptoms denote suppuration, which sometimes bursts into the cavity of the chest, constituting what is called an empyema.

Causes.—Sudden suppression of perspiration—wetting

the feet—great exertion in singing or playing on wind instruments—sudden suppression of some accustomed evacuation—translation of rheumatism or gout.

Regular Treatment.—"When the fever &c. run high blood letting may be repeated even 4, 5 or 6 times."—"Neither flow of the catamenia, nor the lochia, nor old age, nor infancy, should deter us from a general abstraction of blood."—*Martinet*

Natural Treatment.—This should be very much the same as in pleurisy, excepting that we should more particular to have the patient inhale the vapor while being steamed. He may breathe vapor from the spout of a coffee pot at other times. We must besides make a more liberal use of expectorants.—For this purpose take liquor ice root, skunk cabbage, wild turnip and flax seed—make a tea and use freely. If the treatment supposed be not sufficient to keep up a perspiration, take smartweed, bone-set and mayweed, make a tea and use plentifully. We have found this to have most decided benefit in this disease. Remember that the sweating must not subside till the patient is fairly relieved.

EXAMPLE.—We were called to attend a Mr. Potter of Shaftsbury Vt. in latter part of Oct. 1842. About 6 or 7 weeks previous he was attacked by inflammation of the lungs, and attended by Dr. M— of this town. He had been through the Doctor's usual round of treatment—bleeding, purging, blistering—Dovers powders, antimony. and epicac in broken doses; together with 20 or 30 antimony sores upon his chest. Failing in all his attempts the Dr. had forsaken him, saying he could not live 24 hours (very natural conclusion after such a display of science.) We found him bolstered up in the front door of the house, and the windows open besides, although the weather was quite cold; this was occasioned by the great difficulty of breathing. If the doors were shut it produced an effect upon him like suffocation. The pulse was quick and fluttering; scarcely perceptible at the wrist—feet and legs very much swollen—raising pus streaked with blood—left side enlarged; upon which he was lying—night sweats—hectic fever, and diarrhœa.

These symptoms led us to suspect an empyema, and we

accordingly advised an operation, to which his friends objected.

Ordering composition and stomach pills once in 2 hours; linament to bathe the surface, and a poultice over the chest to heal the antimony sores; we left. On my next visit, the friends had concluded that an operation was the only alternative.

We then proceeded to make an incision between the fourth and fifth rib on the affected side. The matter spouted to the height of 6 inches, the patient felt immediate relief, the breathing become easy and he called for the shutting of the doors and windows. We then left him in the care of I. N. Mason, T. P., who applied the usual Thomsonian remedies. During the first 24 hours the patient discharged a gallon of matter, and continued to discharge from a pint to a quart daily for some time afterward. In about 2 months we repeated the operation just above the diaphragm, the constant bubbling of air from this incision showed that the abscess had made a communication into the substance of the lungs. In April following he was about and is now a laboring man; but he still bears the scars of the antimony which are equal to those of the knife—a most fortunate escape from a learned student of the “seat and cause of disease,” the same one who exhibited an equal amount of learned ignorance in another case, concerning which he refused to counsel with us, because, forsooth, we might not know how many bones there were in the body.

—00—

INFLAMMATION OF THE BOWELS.

SYMPTOMS.—Sharp pain in the bowels, shooting round the navel; increased by pressure—belching of wind—sickness at the stomach—vomiting of bilious matter—obstinate costiveness—thirst—heat—great anxiety—quick, hard and small pulse. Afterward the bowels are affected with spasms;—very painful to the touch;—and drawn together in lumpy contractions.

FAVORABLE.—Pain abating *gradually*—natural stools—

general sweating—copious discharges of loaded urine—and a firm equal pulse.

UNFAVORABLE.—*Sudden* remission of pain—sinking and irregularity of the pulse—shrinking of the features—suppression of urine—hiccough—and distention of the belly which sounds on being struck with the finger. It is distinguished from colic by the pain being increased by pressure, whereas colic is relieved by it.

Causes.—Irritating substances—cold—wading in cold water—neglected costiveness—unripe fruit—strangulated rupture—and the use of opium, antimony, and all corrosive poisons.

Regular Treatment.—‘Bleeding is the sheet anchor in this disease, and the only thing that can be depended on.—Fomentations, laxative enemas, leeches and opium—blisters upon the bowels—in desperate cases, quick silver may be given to the amount of several ounces, or even a pound, but should not exceed that, [scientific dose that.—Ed.]—When it is given in too large quantities it defeats its own intention, as it drags down the bottom of the stomach, which prevents its getting over the pylorus.

In this case the patient should be suspended by the heels, [shake him well—Ed.] in order that the quick silver may be discharged by his mouth.’—*Buchan’s Domestic Medicine.*

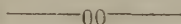
Natural Treatment.—Give a thorough course of medicine, No. 3 for an adult, for a child a lighter course may suffice; commencing with one or more injections. The bowels should be bathed with stimulating linament or No. 6; then apply fomentations of smart weed steeped in salt and vinegar;—if the smart weed is not convenient use hops, tansy or wormwood.

Injections are of the highest importance in this disease, and should be administered every one or two hours until a free operation is produced; using in them, slippery elm, starch or some other mucilage. If after this treatment the bowels have not sufficiently moved, or the pain has not abated, repeat the course of medicine, and administer the following injection; brown lobelia, myrrh, bitter root and slippery elm flour, a teaspoonful each; infuse in swart weed tea to which add molasses and sweet oil; given near-

ly cold, and retained or held up some time and repeat for the purpose of producing prostration.

The vapor bath should be frequently administered, and the patient kept in a free perspiration while in bed by the use of steaming stones to the feet and sides. If this plan does not succeed, make a large poultice of green lobelia, cayenne, salt, slippery elm and weak ley—apply to the bowels; and give of the bile pills. The injections should not be administered in substance, excepting the slippery elm. When convalescent give the strengthening syrup.

Regimen.—For a constant drink, use pennyroyal, balm, sage, slippery elm or flax seed tea. Use none but liquid food and that should be very light and digestible. Avoid all exposure to cold.



INFLAMMATION OF THE STOMACH.

SYMPTOMS.—Burning pain in the region of the stomach, increased when anything is swallowed—pain increased by pressure—vomiting—hiccough—sudden and great weakness—small, quick and hard pulse—tongue red especially the tip and edges.

FAVORABLE.—Pulse becoming soft and full, and diminishing in frequency—pain *gradually* ceasing—and urine depositing a sediment.

UNFAVORABLE.—Faintings—cold clammy sweats—coldness of the extremities—and intermitting pulse—cessation of pain, with a sense of weight remaining—shivering and hectic fever, denote its termination in suppuration.—Violent and unyielding symptoms at first soon followed by a cessation of pain—the pulse continuing its frequency, but becoming weaker—and delirium, denote its termination in gangrene.

Causes.—Acrid and poisonous substances—arsenic—corrosive sublimate—strong alkalies and acids—improper food—spirituous liquors—cold water when heated by exercise—violence from wounds, blows &c.

Regular Treatment.—*Bleed, bleed, bleed*; blister and leech.

Natural Treatment.—As in this disease much distress is caused by swallowing any thing, our remedial means must depend principally upon injections and the vapor bath. What medicine is given by mouth must be strained from every particle of substance, and mixed with a mucilage of slippery elm, made from the unpulverized bark.

Commence by giving injections of composition and nerve powder strained; and the same by mouth if it can be swallowed with success; though in this case it should be weaker. Then apply the vapor bath, wash off with weak ley; and give an injection containing a teaspoonful of brown lobelia, and composition each, infused in smart weed, or white root tea. Repeat this until it produces vomiting, or even prostration. Afterward apply fomentations of smart weed, hops, or other bitter herbs to the stomach and bowels, and renew them frequently. Keep the patient in a gentle perspiration by keeping steaming stones to the feet and sides.

Bathe the region of the stomach frequently with linament; and apply at night a poultice of indian meal and weak ley. Repeat the courses of medicine in this way very thoroughly and as often as once a day until the disease is abated. For a constant drink, use a tea of white or pleurisy root, and slippery elm combined. Whatever is swallowed, should be taken in very small quantities at a time. The vapor bath should be applied as often as twice a day, either with or without a course of medicine.

Regimen.—Use a gruel made by dissolving indian meal in cold water, strain and prepare in the usual way.

—00—

ACUTE INFLAMMATION OF THE LIVER.

SYMPTOMS.—Commencing with chills—followed by pungent pain in the right side, shooting into the shoulder—cough—difficulty of breathing—nausea—vomiting of bilious matter—difficulty of lying on the affected side—yellowness of the skin and eyes—stools clay colored—urine small in quantity and high colored—thirst—furred tongue and other symptoms of fever.

UNFAVORABLE.—Constant hiccoughing—violent fever, and excessive thirst. Chilliness denotes its termination in suppuration. It seldom terminates by any immediately fatal consequences.

FAVORABLE.—Hæmorrhage from the nose—sweating—diarrhœa—urine depositing a copious sediment.

Causes.—Application of cold—intemperate use of spirituous liquors—high living—violent exercise—blows &c.—It is most common in hot climates.

Regular Treatment.—Copious bleeding; then cupping over the liver; should no relief be obtained, general bleeding may again be repeated to the extent of 12 or 16 ounces, drawn from a large orifice, so as to produce fainting even to insensibility. Should the inflammation extend itself, bleeding must not be lost sight of as our sheet anchor, but must be repeated again and again. After full bleedings general and local without alleviation, a large blister may be placed over the affected part. Cathartics should be freely given, consisting of sulphate of potassa, colocynth, and *corrosive sublimate*! [Don't wonder that statistical records show that the regular doctors kill more than they cure] —*Faithhorn on Liver complaints.*

Natural Treatment.—This disease requires frequent courses of medicine, repeated from every day to every third day according to the severity of the case. The vapor bath should be used as often as 12 or 24 hours putting the feet in hot water at the same time and afterward washing off with weak ley or salærated water; then bathe the surface with the gum elastic liniment particularly over the part affected; afterward apply a fomentation or lobelia poultice over the same. Keep the patient in a constant gentle perspiration by often repeated doses of composition and nerve powder; and 2 or 3 of the stomach pills once in 2 or 3 hours. If the bowels be very torpid, give at night, half a teaspoonful of bitter root and cayenne each in molasses or milk, followed by an injection in the morning. "The bitter root" says Dr Thomson, "is the greatest corrector of the bile I know of; and is an excellent medicine to remove costiveness, as it will cause the bowels to move in a natural manner."

If suppuration take place, known by remission of pain

—shiverings—softning of the pulse—and a tumor on the right side; and there be an indication of its breaking externally, apply a poultice of ginger and slippery elm, and open it by an incision as soon as advisable. In this occurrence the patients strength must be supported by the following tonic, balmony, golden seal, poplar, and prickly ash, equal parts; giving a teaspoonful 3 times a day.

The extract or syrup of dandelion, or what is much better, the insippisated juice, is an excellent article in this disease and may be used freely. If the urine be much suppressed, making a free use of diuretics, we have found very useful in this complaint.

Regimen.—Abstain from all greasy food; let what is taken be light and digestible; and make use of acidulous drinks, lemonade, an infusion of cranberries, or sumac berries, or what is more preferable at meal time, fresh butter-milk.



INFLAMMATION OF THE KIDNIES.

SYMPTOMS.—Deep seated pain in the small of the back, extending downward and forward—urine small in quantity, with difficulty of passing it; and sometimes bloody—nausea, vomiting—and fever.

FAVORABLE.—Gradual abatement of pain and fever—copious secretion of high colored mucous urine and bleeding from the nose &c.

UNFAVORABLE.—After the seventh or ninth day remission of pain—shivering—throbbings—and hectic fever, denote its termination in suppuration.—Sudden cessation of pain after severe and obstinate symptoms—sinking of the pulse—and cold sweats denote its termination in gangrene; which, however is a rare occurrence.

Causes.—Cold—spanish flies—intemperance—straining the back—and gravel in the kidneys.

Regular Treatment.—Bleed—bleed—bleed and leech—give salt petre—antimony—opium &c. &c.

Natural Treatment.—Commence by giving an injection of raspberry, nerve powder, and cleavers, made into a

tea: add a mucilage of slippery elm, and a teaspoonful of green lobelia; given nearly cold and retained some time. Then place the patients feet in hot water, and give him a vapor bath, repeating every 12 or 24 hours; or if the fever be high give a full course of medicine.

For a constant medicine, infuse a teaspoonful of composition in a tea of cleavers; add a teaspoonful of cough balsam, and give every two hours. The back and bowels should be rubbed freely with No. 6, or stimulating liniment; afterward applying a fomentation of smart weed, wormwood, or hops. A decoction of the dried leaves of the peach tree have been found highly useful in this disease. The uva ursi, or bears whortlebury, is also very highly recommended.

Other diuretics may be employed, such as queen of the meadow, white strawberry, milkweed root, or parsley.—The patient should be kept in a constant perspiration by the use of steaming stones, and warm stimulating teas, as in other inflammations.

When recovering, poplar is the most suitable tonic that can be given.

—00—

INFLAMMATION OF THE BLADDER.

SYMPTOMS.—Pain and swelling of the bladder, increased by pressure—frequent desire to make water—urine small in quantity, and passed with much pain—great restless—vomiting—and delirium.

Causes.—Spanish flies—ardent spirits—cold—and inflammation of the neighboring parts.

Natural Treatment.—The same as in inflammation of the kidneys, excepting that the linament and fomentations should be applied over the region of the bladder.

—00—

INFLAMMATORY RHEUMATISM.

SYMPTOMS.—Commencing with chills and flushes of

heat—acute pain in the large joints, mostly—joints frequently red—swollen—and tender to the touch—great thirst,—loss of appetite—and general symptoms of fever.—This disease has a peculiar tendency to shift from one joint to another; and sometimes to the membranes of lungs and heart.—The Pulse is quick full and regular, excepting when it affects the heart or lungs, when it is intermitting, slow, or otherwise variable. In this change there is also much difficulty of breathing—raising of frothy mucus—and pain in some part of the chest.

FAVORABLE.—Free perspiration—hemorrhage—sedimentous urine. Although it is sometimes tedious to cure it is seldom fatal.

UNFAVORABLE.—When it is translated to the chest or head.

Causes.—Sleeping in damp beds—living within damp walls and other exposure to cold after the joints are weakened by severe exercise. It generally occurs in people of a muscular make, or full habit.

Regular Treatment—Bleeding, cupping, leeching issues, digitalis, hyocyamus, cicuta, antimony, salt petre, opium, calomel, blisters and arsenic.—See *Thomas' Practice*.

The following is Bouillaud's treatment; 1st day, bleeding from 16 to 24 ounces.

2nd day, 2 bleedings, from 12 to 16 ounces each; and cupping from 12 to 20 ounces from the affected joints and region of the heart.

3rd day, 1 bleeding, and 12 or 16 ounces by cupping.

4th day, bleeding 12 or 16 ounces.

5th day, bleeding 12 ounces [if the disease or patient exist of course. In all, amounting to about 1-3 of the blood of an ordinary person!—See *select Medical library, Vol. I.*

Natural Treatment.—If the attack is mild, place the patients feet in a vessel of hot water, being near the fire and well shielded with a blanket; give him freely of composition and nerve powder, or the stimulating tea and No. 6; add hot water to the vessel in which his feet are placed until a free perspiration is had; then bathe the affected parts freely with rheumatic liniment, or No. 6; and repeat 3 or 4 times a day. At night the diseased joints

should be bathed with weak ley previous to applying the liniment. In obstinate cases, thorough courses of medicine should be given every 1st, 2nd or 3rd day according to the case.

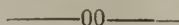
For an intermediate treatment, a dose of composition and No. 6 may be taken once in 4 hours ; alternating with th s, give once in 4 hours two thirds of a teacupful of the following tea: 2 table spoons full of black cohosh, 1 of prickly ash bark or berries, 1 of nerve powder, and a handful of cocash root; 2 or 3 of the stomach pills may be given at the same time. The bowels should be kept open by injections, or the bile pills. If the patient is much debilitated, the entire surface of the body may be bathed with the Rheumatic liniment after each course.

Keep the affected joints covered with the stimulating poultice, particularly at night. The oil of origanum, hemlock, cedar, brittish oil. are all highly recommended in this complaint. Cloths wet in hot beef brine and applied, although rather droll, has been found very serviceable. Cloths wet in a strong tea of hemlock boughs, may be wrapped around heated stones, and applied to the patient's feet and sides to keep him in a perspiration.

EXAMPLE.—We were recently acquainted with a case of this disease that unfortunately proved fatal. It may not be generally known that the pericardium or heart case, and the pleura, belong to the same system of membranes, (the synovial,) which are the seat of this disease in the joints ; and that the heart is often primarily affected. This latter circumstance was evidently the case in the patient to which we allude ; as was evinced by the palpitation that occurred from the first. A post mortem examination of this case, showed the heart to be somewhat enlarged, with an extravasation of blood on the surface ; and strong adhesions between the organ and the pericardium.

There were also extensive adhesions between all the lobes of the lungs and the pleura ; and some between the diaphragm and the liver. These were followed by an effusion of water in the chest, which terminated life. This case shows the importance of withdrawing dis-

eased action, or rather the morbid fluids from the central organs and giving them vent at the extremities and surface. The greater and more constant effort of nature we can induce in joints of the extremities, the more safe will be the heart and lungs.



G O U T .

SYMPTOMS.—Commencing, or preceded by symptoms of dyspepsia, followed by acute pain in the small joints of the hands or feet; particularly the great toe—swelling—redness—soreness—The paroxysm coming on at night—A disposition to change situation; particularly to the corresponding joints of the opposite limb. It is sometimes repelled to the stomach, chest and head.—After a long continuance chalky concretions from about the joints; and gravel often occurs.

FAVORABLE.—Free perspiration—increased flow of urine—the affected parts becoming itchy—and the cuticle falling off in scales.

UNFAVORABLE.—The disease suddenly leaving the joints, followed by nausea—vomiting—anxiety—and pain and coldness in the region of the stomach, show it has fallen on the latter organ—Fainting, palpitation, and asthmatic symptoms, show it has fallen on the chest; pain in the head, giddiness, palsy, or apoplexy, show that it has fallen on the head.

CAUSES.—High living, spirituous liquors and indolence; with the more immediate exciting causes of cold, fatigue, fasting, &c. Some are predisposed to it.

Natural Treatment.—The true way to cure this disease is by perspiration, and temperance. Keep the diseased joints well covered with flannel; washed with weak ley; rubbed with liniment or No. 6; fomented; and kept constantly sweating. Make a constant drink of stimulants, astringents and tonics; say composition and poplar combined. The proximate cause of this disease is vitiated, or morbid substance in the fluids; therefore for a quick and effectual cure we must depend

on courses of medicine. If the disease is translated to some vital organ, apply steam, vinegar and cayenne to the lower extremities, keeping the head and chest cool.

REGIMEN.—“Live on bran bread and earn it.”—*Albernethy*.

—00—

ERYSIPELAS.

This is an inflammation of the skin.

SYMPTOMS.—Commencing with fever; in a few days, swelling and redness takes place in some part of the skin; spreading, and followed by small eruptions, ending in branny scales. It sometimes attacks the face, spreading over the head, causing so much swelling as to produce blindness; and occasionally effects the membranes of the brain; in which case the disease subsides externally; in fact, like some other diseases, it seems to be repelled by unfavorable circumstances, to the internal and more vital organs. It is a disease easily re-produced.

FAVORABLE.—A warm spontaneous perspiration and other symptoms that characterize the substance of other inflammations.

UNFAVORABLE.—Very high fever, stupor and delirium, denote that it has affected the brain. It may also fall upon the organs of the chest and abdomen.

CAUSES.—Application of cold to the body after severe exercise. intemperance, acrid substances applied to the skin, and irritating food.

Regular Treatment.—Bleeding, purging, with salts, Dover's powders, blisters, opium, nitre, and washing the parts with laudanum and lead water, generally irregular and uncertain.

Natural Treatment.—Keep an open outlet in the cutaneous system, with a constant determination from centre to surface. Give constantly a cup of Composition and 2 stomach pills, once in 2 hours. Use the vapor bath once or twice a day, according to the case.—Keep the bowels open by the use of injections and un-

bolted wheat bread. And upon the inflamed surface keep cloths wet in a strong tea of raspberry, sumac, or witchhazle, to which is added castile soap and salt applied cold. Put on the diseased part, and the adjacent skin two or three times a day, equal parts of third preparation and sweet oil; this, Mattson says, will stop its spreading. If this treatment does not seem sufficient, we should add, to it complete courses of medicine. Remember to keep up a constant perspiration. The wilted leaves of plantain, basswood, beach, striped maple, &c, have been found to be very useful in this complaint. When the disease appears in a chronic form, we should use occasional courses of medicine, and other treatment like that above, with the addition of a glass of the *Antiscorbutic Syrup*, 3 or 4 times a day.

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INFLAMMATORY SORE THROAT; OR QUINZY.

SYMPTOMS.—Chills and hot flashes, pain and heat in the tonsils, or “almonds of the ear,” and the throat, great difficulty of swallowing, hoarseness, shooting pains, and sometimes suppuration.

FAVORABLE.—Resolution, or gradual abatement of the inflammation, or early suppuration.

UNFAVORABLE.—When the swelling is so great as to prevent swallowing, or produce suffocation. It seldom proves fatal.

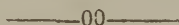
Causes.—Cold—damp clothes—wet feet, &c.

Treatment.—In mild attacks of the disease, bathe the feet in hot water; and drink freely of composition and No. 6; apply the stimulating liniment or No. 6 to the throat; moisten a flannel cloth with same and bind tightly around the neck; and rub the glands internally with No. 6 or cayenne.

If this does not succeed, give thorough courses of medicine as often as necessary. Gargle the throat with salt and vinegar and water; or bayberry and cayenne. Steam, or foment the throat externally; and apply the stimulating poultice. Inhaling the vapor of vinegar and water is very

servicable. A coffee pot, or an inverted funnel in a basin containing the liquid, may be used for this purpose. If there be much difficulty of swallowing, take 2 tablespoonsful of vinegar tincture, and 2 of vinegar, add water enough to fill a teacup, with a teaspoonful of salt, and a half of cayenne; sweeten with honey, and swallow a table spoonful at a time, frequently. A swab may be made by stripping a feather excepting the tip, with which to apply this and other medicine. If the glands suppurate, lance them as soon as practicable. The bowels should be kept open with injections.

Regimen.—Use water gruel, crust coffee &c. If a case should happen where the patient could not swallow, nutritious injections should be used; made of thin porridge, or chicken soup.



INFLAMMATION OF THE EYES.

SYMPTOMS.—Pain—swelling redness and a sensation resembling sand in the eyes—intolerance of light, copious flow of tears—pain in the head and sometimes ulceration of the lids.

Causes.—Cold after excessive heat, exposure to wind, intemperance, long reading, loss of sleep, sudden changes from light to darkness, foreign substances, vitrol, calomel and lard, and other nostrums of the regulars. Measles, small pox, scrofula, and sometimes, contagion.

Regular Treatment.—Bleeding, leeching, purging, blistering, opium, belladonna, zinc, copper, lead, alum, Calomel, blown into the eye, opium dropped between the eyelids, caustics and setons.—See *Martinet's Therapeutics*.

Natural Treatment.—If the inflammation is of recent origin, place the feet of the patient in hot water; shield him from the air with blankets; continue to add hot water; give freely of composition and nerve powder, and a dose of the stomach pills, until a free perspiration is had. Then let the patient recline upon some chairs, or a sofa, near a fire, take a sponge, or several thicknesses of linen, or cotton batting, and lay it over the eyes; wet with cold water,

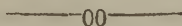
and continue to pour it on until the pain has abated; keeping up a perspiration at the same time. Then make a poultice of slippery elm and pounded cracker, moistened with a strong tea of red raspberry or witchhazle; applied to the eyes; cold. If the pain and inflammation return, repeat the operation. If this does not sufficiently succeed, give a full course of medicine. While giving the bath (which may be continued from a half to an hour,) keep the patients feet in water as hot as he can bear; applying the cold compress, as above, for a few minutes, or until the eyes and head are cooled. Then expose the head to the steam until a perspiration is produced, and again put on the cold application. If the patient should be faint, throw a little cold water on the face and stomach. While in the steam, the patient should open and shut his eyes frequently. After this operation bathe his eyes with a tea of green osier, and a little of the tincture of myrrh, and apply the above poultice. Repeat this operation as often as the case may require. After the reduction of the inflammation, if there should be a film over the eyes, take hens oil 2 oz., 3rd preparation 2 teaspoonsful; shake well, and apply to eyes 2 or 3 times a day. Before the application they should be cleansed with a tea of the bark of green osier.

Too much reliance cannot be placed on this treatment, as we have prescribed it in more than 40 cases during the last 9 years without a single failure; many had been abandoned by the faculty as incurable. A tincture of golden seal and the *eye water* may be used to strengthen the eye. Diluted white of egg has been highly recommended for this purpose.

If the inflammation should arise from scrofula, or other constitutional diseases, the general treatment should be the same as prescribed in those cases.

EXAMPLE.—In the fall of 1837, we were called to visit Mr. M. Hurd of this town, who had been afflicted for 7 years with this disease and the regular doctors, many whom he had consulted in this state and New York, all to no effect. During this period, he had not been able to labor, or travel without the use of goggles. At the time we were called, he had been confined about 3 months un-

der the care of Dr. M—. of P—. He was perfectly blind, with excessive pain and swelling in the eyes and head, besides, loss of appetite, vomiting, bloating of the bowels and great weakness and loss of flesh—the natural result of so long a regular treatment. But through the urgent solicitation of himself and friends we were induced to try the experiment; for such it must be considered. We commenced by giving him a regular course of medicine; this afforded temporary relief, but in the course of 24 hours the pain had returned with its former violence. We then adopted the course above recommended with great success; the pain and inflammation immediately abated; and he was able to open and shut his eyes for the first time in three months. They were covered with a white film; and upon the cornea of one was an ulcer which obscured the sight; and 2 more upon different sections of the other. The films speedily disappeared on the application of the medicine described. His sight, and his general health were restored; and he has had no return of the disease to the present time.



INFLAMMATION OF THE EAR.

SYMPTOMS.—Soreness, stiffness, and acute pain in the ear. It frequently ends in suppuration; and sometimes causes deafness.

Causes.—Partial application of cold to body—injuries—hardened wax—scarlet fever and small pox.

Regular Treatment.—Blood letting, blistering and opium.

Natural Treatment.—Dissolve some camphor in sweet oil; pour a suitable quantity into the ear; rub the tonsil on the affected side with No. 6; drink freely of the composition or stimulating tea; get into bed; put a steaming stone to the feet, another to the ear, covering the whole head; and take a thorough sweat. If this does not answer the purpose, give a full course of medicine.

CHAP. V.

HEMORRHAGES.

BLEEDING FROM THE LUNGS.

SYMPTOMS.—Discharging blood from the mouth of a bright red color;—brought up with more or less coughing;—sometimes preceded by a salt taste in the spittle, —and oppression of the chest with more or less pain.

Causes.—Weakness, receding of blood from the surface, pulmonary consumption, loud speaking, sensuality, excessive exertions, blows on the chest, and suppression of some accustomed evacuation.

Regular Treatment.—Bleeding, sugar of lead, cold, digitalis, henbane, opium, blisters and seatons [Bleeding for bleeding—means to ends—but quacks use one medicine for every thing.]

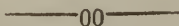
Natural Treatment.—The principal indications in this difficulty, are to remove the original cause, equalize the circulation, and astringe the ruptured vessels. The treatment for the first must consist in a great measure in a proper regimen; for the second, and third, place the patients feet in hot water, cover warmly, give freely of a strong tea of witchhazle, sumac or the like, with the addition of nauseating doses of 3rd preparation.—

This will generally give immediate relief ; but if it is not sufficient, the addition of an emetic of brown lobelia will rarely fail. It is a fact that astringent medicines may be received into the system by the way of the stomach, and produce their specific effect upon hæmorrhagic vessels. The vapor bath, and a free use of cayenne, or even a full course of medicine may be added to this treatment.

If a cough occurs in this difficulty, the cough balsam, or cough drops should be used. A strong solution of common salt will frequently stop bleeding from the lungs.

When the hæmorrhage is stopped, the patient may inhale the vapor of tar, and make a gentle use of the *lung inflator* to heal, strengthen, and expand the lungs ; and also take some mild tonic to restore the general power of the system.

Regimen.—Avoid wetting the feet, being chilled or any excess. Use a light, but strengthening diet ; and frequently sponge the surface with salt and vinegar and water, followed by brisk rubbing with a dry towel or flesh brush. If oppression of the chest, palpitation, or faintness occur, allow no fear, make a vigorous effort of the *will* to dispel the sinking feeling, and take a dose of composition.



BLEEDING FROM THE STOMACH.

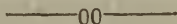
Symptoms.—Vomiting blood in a considerable quantity ;—of a dark color, somewhat clotted, and mixed with the contents of the stomach ;—preceded by a sense of weight, pain and anxiety in the region of the stomach ;—and unattended with coughing.

Causes.—External blows, poisons, inflammation, cancer or shirrus, suppression of some accustomed evacuation, and the typhus state.

Treatment.—In this difficulty it will be necessary to take very similar means to equalize the circulation as that prescribed in preceding section. A strong decoction of

sumac or witch hazle, thickened with a mucilage of slippery elm. should be taken into the stomach, and also given by injection. If it has arisen as a symptomatic affection of some other disease, antiseptics should be given; No. 6, tar water, white root, or milkweed root tea may be used.— If it has arisen from schirrus, cancer, or some casualty, the cough balsam will prove a very healing remedy. If costiveness exists in any degree, the bile pills should be used; for besides their loosening effect, they heal, and mitigate pain.

Regimen.—The diet should consist of liquids, or puddings; and much exertion should be avoided.



BLEEDING FROM THE NOSE.

SYMPTOMS.—It is sometimes preceded by pain and heaviness in the head, dizziness, flushing of the face, heat and itching in the nose, quickness of the pulse, cold feet and chills.

Causes.—Determination of blood to the head, violent exercise, stooping, suppression of menses, and blows on the head and nose.

Treatment.—Keep the head and body erect; apply cold water to the forehead and back of the neck; take a dose of composition or cayenne, and snuff up the nose some of the fine flour of slippery elm. This will generally stop it; but if not, put the patients' feet in hot water, and give a teaspoonful of the tincture of lobelia.

A snuff made of the mare's tail (*hippurus vulgaris*) is said to cure it immediately.

Holding up the arm on the affected side is a cure recently discovered. The column of blood in the artery of the arm pressing down upon blood of the aorta, prevents it from ascending in its usual quantity, as well to the head, as to the arm. Where it is habitual, taking a dose of cayenne at meal time for a short time has been known to effect a cure.

BLEEDING FROM THE URINARY ORGANS.

SYMPTOMS.—Discharging blood attended with acute pain in the back, indicates that it comes from the kidneys or ureters.—Attended only with heat and pain in the bottom of the belly, indicates that it comes from the bladder. In these cases the blood is flaky and mixed with urine. If it passes pure, it indicates that it comes from the urethra.

CAUSES.—External injuries, hard lifting, stone in the kidneys or bladder, and Spanish flies.

Treatment.—If it has arisen from a fall or bruise, give freely of composition and slippery elm, equal parts, and administer the vapor bath and an injection. If the hæmorrhage is profuse and dangerous, put the patient's feet in hot water, and apply the steam, at the same time giving tincture of lobelia, and cayenne until sickness or even vomiting is produced ; and also a tea of sumac, cocosh or beth root, with some nucilage, as slippery elm, or gum arabic. If it arises from stone or gravel, the cause must be removed : See that disease.



UTERINE HEMOERRHAGE.

When the monthly evacuation of females occurs oftener, or in greater quantity than natural, it frequently occasions extreme debility.

SYMPTOMS.—In the robust, it is attended with headache, dizziness, pain in the back and loins, symptoms of fever. In the debilitated, it is attended with paleness of the countenance, laxity of the muscles, easy fatigue, coldness of the extremities, pains in the back on remaining some time in one posture, indigestion, and nervousness.

Causes.—Violent exercise of dancing or walking, bruises, violent passions of mind. tight lacing, application of cold to the feet, excessive venery, abortions, indolence, despondency, low diet, tea and coffee, close warm rooms, schirrus, cancer, and polypi.

Treatment.—Previous to the turns, the patient should

take a dose of composition and stomach pills 2 or 3 times a day; and make a frequent use of the vapor bath, followed by a wash of salt and vinegar and water with brisk rubbing. If there are febrile symptoms, give a course of medicine. During the flow, a tea of sumac, raspberry, or beth root may be used, with frequent astringent and stimulating injections, per anum. When the flow has ceased the patient should take a dose of *female restorative* 3 or 4 times a day.

If the hæmorrhage arises from cancer or the like, take freely of the antiscorbutic syrup, and the bile pills. If from polypi, they should be removed if possible. In either case, astringent and healing injections will prove highly useful, applied directly to the affected parts.

FLOODING, is another species of uterine hæmorrhage, which generally takes place in some degree after parturition; and sometimes to such an extent as to be dangerous. This is a flow of pure blood, and may be distinguished, in any case from the menstrual flux, by its quality of coagulating, which the menses have not.

Treatment.—Profuse flooding should be immediately stopped by putting the patient in a recumbent posture, give a dose of composition with a teaspoonful of the tincture of lobelia, put steaming stones to the feet; and let the patient drink freely of a tea of cocash; or some other astringent if that cannot be had. The case is rare where this will not be effectual; but if not, increase the quantity of lobelia, and give an enema of witch hazle or cranes bill, well strained, per vagina.

TURN OF LIFE.—The habitual evacuation of females begin to cease between the 45th and 50th year, when they become irregular—often painful, profuse, and attended with various derangements of the general system, constituting a very critical period in their lives.

Treatment.—The vapor bath and the salt and vinegar wash, are valuable remedies in this case. Emetics, or courses of medicine may also be occasionally required; followed by tonics, nourishing diet and exercise. The bowels should be kept open with injections and an aperient diet, such as indian corn and unbolted wheat. In bad cases, injections, per vagina, of witch hazle, cranes-

bill, or beth root, should be used ; and a strong tea of raspberry used for a constant drink ; with a regular dose of stomach pills, 2 or 3 times a day washed down with the female restorative, or composition. The unicorn (*Helonias dioicia*) is justly celebrated in female weakness ; we have known it produce most surprising and agreeable effects ;—it is contained in the female restorative.

Regimen.—The best means of curing an immoderate flow of menses is by adopting such habits as will establish the general strength and regularity of the system. The diet should be nourishing—easily digested—taken in temperate quantity, and at regular hours. Tea and coffee should be rarely used. The patient should be much in the open air, bathe frequently and take considerable *daily* exercise, either in walking, or riding on horse back ; and avoid excitements that produce a determination of blood to the uterus. The same regimen will greatly prevent the dangers of parturition.

EXAMPLE.—We were once called to attend a lady in Pownal, Vt., who was attacked with a severe Uterine Hemoerrhage about the cessation of the menses ; and had been attended by Dr. Morgan, of the same town. We found her in a complete state of exhaustion from the great loss of blood ; so weak as to be unable to speak ; and some one constantly fanning her, or holding some reviving vapor to her nose. The regular had bled her ; given antimony, James' powders, and salts ; ordered cold applications to the bowels, thin clothing and water gruel for nourishment.—We at once resolved to reverse his whole process. Instead of his cooling treatment, we put warm fomentations upon the bowels, increased the bedding and warmed the room. Instead of his cooling cathartics, we gave an emetic and stimulating injections. Instead of bleeding, we produced sweating. Instead of mineral styptics, we used vegetable astringents, particularly crane's bill and witch-hazel combined, with tincture of myrrh, by injections, and also for a drink. Instead of water gruel, we gave milk porridge. And instead of the patient's constantly sinking under the treatment, in four hours she could talk,

and afterward rapidly recovered ; has since had an attack, but by the same simple means, relieved herself ; and now bids defiance to the regulars.

For Hæmoerrhages from wounds, see Cuts and Bruises.

CHAP. VI.

CONGESTIONS.

CONGESTION IN GENERAL.

This kind of affection is probably the simplest form of disease that exists ; although often highly dangerous. It consists in nothing but weakness—deficiency of action—or want of tone in the vessels to propel the blood to the surface , consequently there are central collections of blood, varying according to the circumstances of the patient ;—sometimes in the general venous system—sometimes in the head—or in the lungs and heart—or in the liver and spleen. In fatal cases, these are attended with an effusion of serum and sometimes of blood into the organ concerned. This affection frequently forms the most striking symptom in the bilious fevers of the Western and Southern States; and is then called congestive fever. It seems that all fevers are preceded by some degree of congestion ; and the state of fever, or excitement, is the effort of Nature that succeeds that stage. Where there is not vigor enough in the body to produce this excitement, an intelligent regular recommends the administration of stimulants internally, and the application of heat externally—a Thomsonian

treatment—However, he considers that congestion is an exception to all other diseases.—But why aid nature to produce an excitement, and then turn about and attempt to repress it—why apply the antiphlogistic treatment—Here we discover the opening of the path where the regulars have mistaken their fatal way. The course in which Nature begins is the onward way for us to pursue.

SYMPTOMS of congestion will be found in the preceding sections.

Causes.—The most common is a long application of cold to the body ; which presents it in its simplest form ; also, excessive evacuations, loss of blood, fear, anger, sedative poisons, miasma, cholera morbus, parturition, drunkenness, overeating, falls and bruises, and any depressing agent—Children, and old people are the most liable to congestions.

—00—

APOPLEXY.

This is a congestion in the head.

SYMPTOMS.—Sudden suspension of sensibility and motion of the limbs, sometimes falling down, pulse small at first, slow and full afterward, laborous breathing, and often snoring. It is often preceded by dizziness, ringing in the ears, dimness of sight, pain and heaviness in the head, numbness of some of the limbs, and difficulty of speech.

FAVORABLE.—The power of speaking and noticing surrounding objects, spasm, fever, nose bleed, and other critical evacuations, particularly warm sweating.—It does not always prove fatal on the first or second attack. Sometimes, they recover entirely, and sometimes, palsy of some part and loss of memory follows it. Fever often succeeds.

UNFAVORABLE.—Perfect stupor resembling a deep heavy sleep, from which the patient cannot be aroused, the pulse becoming small, quick and irregular, much

coldness of the extremities, and interrupted breathing.— They seldom live through the third attack.

Causes.—High living, too full eating of animal, and greasy food, use of wine and spirits, stooping, sedentary habits, strong tea and coffee, exposure of the head to the sun, extreme cold, violent passions, suppressed evacuations, translation of gout, and intermittent fevers. Excessive loss of blood, and profuse evacuations have also produced it. It generally occurs in people of a short, thick stature, fleshy constitution, large heads and sanguine temperament ; in whom there is often a hereditary predisposition to it.

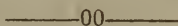
Regular Treatment.—Very copious bleeding, leeching and cupping : *See Martinet.* In serous apoplexy the use of bleeding is doubtful. *See Thomas.* Bleeding will actually cause apoplexy. *See Marshall Hall.*

Natural Treatment.—If the patient is naturally subject to this affection, and feels the premonitory symptoms, the adoption of a very light diet, a course of medicine, an emetic, or a vapor bath, will be likely to prevent an attack. When it occurs so violently that the patient cannot swallow, injections, made strong with cayenne and third preparation, should be given, and often repeated ; elevate the head and cover it with a cloth wet in vinegar ; bathe the feet in hot water, rub them thoroughly with cayenne and vinegar, No. 6, or stimulating linament ; then put steaming stones to them and to the sides and get the patient into a perspiration as soon as possible. Whenever the patient can swallow, give a teaspoonful of 3d preparation in a strong tea of composition or cayenne, every ten minutes until active vomiting is produced. Then give freely of composition, nerve powder, and white root ; two or three stomach pills every hour ; and with the steaming stones, keep up a copious and long-continued perspiration. Injections, containing cayenne and lobelia, should in no case be omitted, as they possess the highest value in all determinations to the head. If injections do not sufficiently move the bowels, a dose of castor oil, or some other suitable cathartic may be administered ; taking care to keep up a determination to the surface. If the patient

becomes convalescent, give several courses of medicine. It is best to give the medicine in but little fluid.

Regimen.—Rice, or Indian pudding, or some other very light diet that does not contain much fluid, should be used while the attack lasts. A person who has recovered from this malady, should ever after use but little animal food ; avoid full eating, and late suppers ; renounce tea and coffee ; and take frequent exercise.

EXAMPLE.—Since commencing this article we were called to attend a Mrs. W— in her third attack of apoplexy. The symptoms were very discouraging, and we nearly despaired of her restoration ; but fortunately the family were thorough Thomsonians, and faithfully carried out our prescriptions, giving her thorough and long continued steaming ; with emetics, injections, &c.—The result is that in one week she is restored to a degree that surprises even a steam doctor. Steaming in this case is a thousand times better than bleeding.



FAINTING.

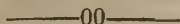
This difficulty is attended with both a loss of nervous action, and a general congestion of blood upon the centre of the system.

SYMPTOMS.—Commencing with anxiety about the chest, swimming of the head, weakness, darkness before the eyes ; followed by a sudden loss of sensibility and motion, cessation of the pulse, and of breathing.

Causes.—Violent emotions, injuries, loss of blood, affections of the heart, &c.

Treatment.—Sprinkling cold water upon the face and breast is a very common and successful remedy. Composition, No. 6, camphor and smelling salts are also very servicable. In bad cases, the 3rd preparation may be given. If a person feels a fainting fit approaching, he should throw himself upon his back and it will almost invariably prevent it. If the affection has arisen

from debility, some bitter tonic, and a restorative regimen should be used.



SUSPENDED ANIMATION.

In most cases of death the blood gradually leaves the capillaries, and returns into the large veins, for some hours after life has become extinct. This is to some extent the case in all kinds of suspended animation; and is a most important idea to be borne in mind by those who attempt the resuscitation of life.

DROWNING.—Persons who have not been under water over 15 minutes, may often be restored to life; and even some after a half an hour and upwards.

SYMPTOMS.—Apparent death, purple or blue color of the face and neck, and bloating of the bowels, are the most remarkable.

FAVORABLE.—Some degree of warmth and relaxation, convulsive starting of the muscles of the face, or feet, spasmodic shiverings, &c.

UNFAVORABLE.—Livid, and dark brown spots on the face, glassy appearance of the eye, flaccid state of the skin and perfect coldness of the body. But the only hopeless signs, are actual putrefaction and long and repeated efforts to restore life without effect.

Treatment.—Take the patient carefully out of the water, strip off his wet clothes; wipe him dry, and if possible, put him in a warm bed, with his head elevated and cover him with blankets; give a teaspoonful of 2d preparation, or if not at hand a tea of cayenne and black pepper; and repeat every 10 minutes to some 6 or 7 times; give in an injection a strong infusion of camphor and a table spoonful of 3rd preparation, several times. While these things are doing, the steam stones be prepared and put to his feet and sides. Great care must be taken to apply the heat moderately at first; gradually increasing it. The stream must not be raised above the fountain, or otherwise, the tide of life cannot flow. With this in view,

let some one keep his hands beneath the bed clothes to regulate the heat. At the same time, let some one take a piece of flannel, wet with cayenne and vinegar, and briskly rub his feet, legs, hands, and arms; keeping them covered with the bedding. And also let another inflate his lungs by blowing into his nostrils, and then gently press the air out of the chest; and repeating, so as to produce an artificial respiration. A tube fitted into one nostril, while the other is held tight, may be used. Sneezing may be excited by introducing into the nostrils, a little bayberry on a feather. The soles of the feet may also be struck with the palm of the hand; and gentle shocks of galvanism or electricity be applied by those who understand them.—When the patient can swallow, give a little nourishing soup, well seasoned with cayenne.

SUFFOCATION.—This too often occurs by breathing carbonic acid, generated by burning coals in tight rooms; or from the limestone in wells, mines and lime kilns; or from fermentation, in brewries and cellars.

SYMPTOMS very similar to drowning.

Treatment.—Never descend into a well, or other place, to rescue a person suffocated with this gas, until cold water has been freely dashed upon him from above; this will not only arouse the nervous power of the patient, and give his central heat a predominance, but it will carry down pure air, and enable others to descend in safety. When he is taken out, let the treatment for drowning be applied. No one should enter a place suspected to contain carbonic, without first sending forward a lighted candle; if it burns brightly, it may be followed with safety.

LIGHTNING.—The safest place for a person during a thunderstorm, is in the centre of a room, and remote from metallic conductors; wetting the floor around the borders, will also add very much to safety. A feather bed is also thought very safe; but it should not be in contact with the walls. Many people suffer much from the fear of lightning when there is no danger. It always strikes where it rains the hardest; and therefore often follows a certain range. If there is a long interval between the flash and report, the striking point is at a distance; if it approaches

near, and in your direction, then precaution will be prudent.

SYMPTOMS.—Apparent death by a stroke of lightning, is characterized by a rigidity of the muscles, and various spots caused by the fluid.

Treatment.—Dashing cold water over the body is the best means that has ever been discovered. But 3rd preparation should be administered at the same time; with injections of nerve powder, cayenne, and lobelia. When resuscitated, give a course of medicine.

FALLS AND BLOWS.—Suspended animation from these causes, is the last resort from which the faculty attempt to draw an excuse for bleeding. But their best authors disapprove it, until a reaction is produced in the system; and most certainly, after that, as Thomson says, “there is a better way to start the blood.

We have heard of a well attested case of this kind, where a regular could not get blood, until a Thomsonian friend had administered some No. 6.

Treatment.—Very much the same as in drowning; excepting that the surface may be bathed with weak ley and cayenne.

HANGING.—**Treatment.**—Very similar to the preceding, excepting that cold fresh butter milk may be applied to the head and neck, and heat or steam to the lower extremities.

EXTREME COLD.—**Treatment.**—Give freely of 3rd preparation and cayenne, both ways. Rub the limbs briskly with snow or cold water; then with weak ley and cayenne; then with warm vinegar and cayenne; at the same time continuing to administer stimulants internally; at length gradually apply the vapor bath, and give a course of medicine.

CHAP. VII.

OBSTRUCTIONS,---Acute.

STRANGURY.

SYMPTOMS.—Frequent inclination to make water;—attended with smarting pain, heat, and difficulty in voiding it—and sometimes, complete retention of urine, with extreme pain and swelling of the bladder. It is seldom attended with danger.

Causes.—Inflammation of the urethra, syphilis—ulcer of the prostate gland—inflammation of the bladder, or kidneys—blisters of spanish flies—spirituous liquors—and particles of gravel in the bladder and urethra. If it is caused by stone or gravel in the kidney or ureter—acute pains in the loins, with nausea and vomiting.—If in the bladder or urethra—pain will be felt at the end of the penis, after urinating; and the stream of water will be divided or twisted. If from diseased prostate gland—an indolent tumor will be found in the perineum.

Treatment—In this disease, in its mild forms we may rely principally upon diuretics. The patient should make a free use of cleavers, queen of the meadow, and juniper berries. A strong decoction of the above articles may be used several times a day; together with composition or spice bitters. A tea of the honey bee acts like a charm in strangury. The cough balsam is highly beneficial in this case. If the attack should be severe, and accompanied with much inflammation, a thorough course of medicine should be given; the injections to be made of soap suds or salætratus water, and a large portion of lobelia. Frequent steamings with the hip bath should be used. If there be much pain, the back and bowels may be rubbed with liniment, and fomented with smart weed. A common drink of the

mucilage of slippery elm, or gum arabic, should be used.

SUPPRESSION OF URINE

This is an inability of the kidneys to excrete the urine; and is often mistaken for strangury.

SYMPTOMS — Restlessness, head ache, nausea, fever, pains in the back, and what little urine is voided, produces a burning or scalding sensation. At length the perspiration smells of urine; and sometimes stupor, delirium, convulsions, and death is the result.

Causes. — Inflammation of the kidneys, spanish flies, mercury, and gravel in the kidneys. In females it is sometimes caused by taking cold at the time of the menstrual flow.

Treatment. — Unless this affection be slight, and yields readily to diuretics, full and repeated courses of medicine should be administered. The general principles of the treatment should be very much the same as in Strangury. In the suppression that occurs in the dropsy that succeeds the scarlet fever, the honey bee has been used with good success. It is favorably spoken of by Worthy and Hearsy, Thomsonian M. D's., but let it be well proved before it is adopted among Thomsonians.

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SUPPRESSION OF MENSES.

SYMPTOMS. — Non appearance of the discharge at the wonted time; or sudden stoppage after it has commenced, accompanied with chills, fever, head-ache, loss of appetite, tenderness in the region of the uterus, and pain in the loins, back and limbs. If it continues sometime, hæmorrhage is apt to take place from the nose or lungs.

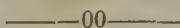
Cause. — Careless wetting of the feet, putting on damp, or thin clothing, and other exposures to cold, especially during the flow. Also, fear, disappointment, pulmonary consumption, and other causes of weakness.

A species called PAINFUL MENSTRUATION, attended with a scanty discharge, false membrane, and bearing down pains, is caused by abortion, and other violations, common to very artificial life.

When the menses do not appear at the proper time of life ; or have been long suppressed it is called a RETENTION OF MENSES.—*See Chlorosis.*

Treatment.—In recent cases, but little more is required, than bathing the feet at night in hot water ; or using the hip bath, and drinking freely of composition and No. 6 ; and using the spice bitters through the day. If the patient is not relieved by this, a thorough course of medicine should be given and repeated once or twice a week ; bathing the feet at night, and taking composition and nerve powder during the day. For a specific, take black cohosh, balmony, golden seal, quassia wood, and myrrh, equal parts ; of this 2 oz. may be steeped in a quart of water ; strain, and add a pint of brandy and sugar to make it palatable. Dose, a wine glass full, from 3 to 5 times a day. A strengthening plaster may be worn upon the back.

Regimen.—Cheerful exercise alone will cure many cases and is the greatest preventive known.



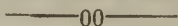
COMMON COLD.

This is at first simply an obstruction of the perspiration ; but it is often followed by a sympathetic obstruction of the mucous membrane of the lungs, and other secreting organs ; with various derangements of the weakest parts of the system ; thus becoming the exciting cause of nearly all "the ills to which flesh is heir."

Regular Treatment.—Where ?

Natural Treatment.—In this every person should be wholly and faithfully his own physician. When any one discovers, that they have taken cold, they should go at once and take heat.—Drink freely of composition, or cayenne, if not at hand, peppermint herb, pennyroyal, or some other stimulating medicine ;—then take the vapor bath, and bathe the feet, or take an old fashioned sweat ; and if necessary an emetic of lobelia, boneset, or blue vervain. If a cough attends, the cough powder, or some mild expectorant may be used ; but do not doctor alone for that, in that

way ; for the original difficulty is in the skin, and to that must the main cure be applied. With those who will be about, the whole, or part of the above prescription should be applied every evening, until well ; remembering to steam thoroughly, sleep warmly, and be careful the next day. It costs far more care to cure a cold, than carelessness to take one. Any person, by a little observation, may know by their feelings, when they contract disease in this way ; and therefore, know how and when to avoid it.—“An ounce of preventive is worth a pound of cure.”—*Thomson*.



CROUP.

This is an affection of the wind pipe and bronchial tubes.

SYMPTOMS.—It mostly attacks children, often commencing suddenly, with a spasmodic cough, and great difficulty of breathing. The voice and cough has a peculiar ringing, or brazen sound ; and the breathing is often attended by a sonorous noise compared to the crowing of a cock. Sometimes it comes on more gradually ; and has premonitory symptoms, such as drowsiness, fretfulness, watery and heavy eyes, and some degree of a shrill cough. It occasionally arises in the course of measles and scarlet fever.

FAVORABLE.—Cessation of the inflammation, breathing becoming easier, free expectoration of matter from the trachea, and raising of the membrane formed there.

UNFAVORABLE.—Much difficulty of breathing, great anxiety, violent fever, frequent coughing, no expectoration, livid countenance, and weak and irregular pulse.

CAUSE.—Exposure to cold. The more immediate cause, is inflammation of the windpipe and its branches, followed by an exudation of lymph, which lines it with a false membrane, and produces suffocation. This obstructing substance is the most remarkable feature of the disease.

REGULAR TREATMENT.—The following is the testimo-

ny of Dr. J. Andrews, of Wallingford, Conn. 'The croup prevailed epidemically in Wallingford in the year 1775. My father and Dr. Potter were the physicians, and it is believed not a child recovered, for they believed it incurable. An old living chronicle has given me the names of the families who buried 16 children who died with it in that year. The course of practice pursued, was to give emetics, calomel in repeated doses, with a free use of seneka and blisters. In 1804 it again became epidemic. For the first 3 that I attended, I prescribed the above treatment; and they died. I afterwards learned the use of blood root and cured several with this alone. But in one case found it would not produce the desired effect without seneka and the usual remedies. The patients skin was dry (I had observed in many cases, where there was a free perspiration, that the breathing was much more easy, than when the skin was dry). I then adopted measures to produce a free perspiration; and no sooner was this effected, than loud rattling breathing came on; I then repeated the emetic of blood root with the desired success; large quantities of viscid phlegm, with bloody matter, and portions of false membrane were thrown up, and the patient recovered. After this I adopted the warm bath, steam and other sweating methods. And from that time there were 30 cases in my neighborhood, and but one proved fatal; and that was not attended until the fourth day, when too late.'—*Medical Repository Vol. VIII No. 3, New Series.*

Here we see, that by their old treatment, the Regulars lost *all*; but by adopting nearly a Thomsonian practice they lost, in reality, *none*.

In view of these facts, how dared the Regulars, through their organs in the Legislature of New York, pronounce the Thomsonians, "ignorant quacks;" not only so but prohibited them from collecting their pay by law; yes more, fined them for practicing at all.

One of these fines was actually executed upon a son of Samuel Thomson; while another of his sons was three times prosecuted for murder or manslaughter; being for the only three patients he lost in three years.—

O, Shame ! it is time thy emblem was a brazen statue.

Natural Treatment.—When this disease is taken in season but little more is required than a common course of medicine ; keeping up for some time after, a free perspiration. But when it has continued a length of time, and the false membrane is extensively formed and attached ; or if the attack be very violent, a thorough emetic, composed of brown lobelia 2 parts, and blood root 1, should be given and repeated every 2 hours ; together with injections of lobelia, several times repeated, with the design of producing prostration. A repetition of the vapor bath should made every 4 or 6 hours, according to the degree of the disease, supporting the internal heat at the same time with composition or cayenne ; and in the intervals keeping up a perspiration with steaming stones. The throat, neck and breast should be frequently bathed with liniment ; afterward, applying a poultice made of lobelia, cayenne, ginger, slippery elm, and salt, and moistened with weak ley and applied as warm as the patient can bear. The above treatment, persevered in, we have never known to fail of producing immediate relief.

EXAMPLE.—We were called, about a year since, to attend upon a child with this complaint, who had been undergoing a pretty thorough Thomsonian treatment for 24 hours, but without permanent relief ; we found the patient in imminent danger, but the family having the utmost confidence in our medicines, administered brown lobelia by injections until prostration was produced followed by steaming ; in 4 hours the child vomited, threw up the false membrane and rapidly recovered.

CHAP. VIII.

POISONS.

MINERAL POISONS.

ARSENIC.—*Symptoms.*—Pricking, burning sensation in the stomach, sudden and excruciating pain in the bowels, severe vomiting, sharp taste in the mouth, tongue and throat parched, anxiety and restlessness, thirst, heat and pain at the pit of the stomach, black offensive stools, small pulse, breathing difficult, irregular palpitations, delirium, convulsions of the epileptic type, and death. Introduced into the system more gradually, it produces irritation of the stomach, swelling and stiffness of the eyelids, itching over the surface, soreness of the gums, and head-ache; afterward diminution of capillary action, paleness and general debility.

OCCASSIONS.—Ratsbane taken by accident, carelessness of druggists, Fowler's solution, and other *regular* prescriptions, rust of german silver, French and Scheele's green of the painters, and malicious intention.

Tests.—Arsenic, when laid on burning charcoal exhales the odor of garlics. The dried powder of any suspected substance, or liquid, from the stomach or elsewhere, may be reduced to the metallie form, as follows: Mix the powder with equal parts of fine charcoal and potash; put it into a glass tube open only at one end, close the other loosely, and expose the closed end to a gradual heat. The arsenic will rise and line the upper end of the tube with a brilliant coating. Or put of the suspected substance into a solution of pearlash; after standing an hour or two, put into it a solution of blue vitriol; this will produce a bright green solution and precipitate.

Treatment.—An emetic of 3rd preparation as soon as possible, washed down with the strongest astringents, and injections of the same; both faithfully and largely repeated, and accompanied with large draughts of molasses and water, with composition and nerve powder. Lime water, prepared chalk, or salætatus may be used with advantage. As soon as the stomach is sufficiently cleansed, slippery elm or linseed tea should be used. Steaming should be omitted until the alimentary canal is cleansed; but if the limbs are cold rub them with vinegar and cayenne. Alkalies are thought very servicable in mineral poisons. Use astringents freely in all internal poisons; and cathartics when done with emetics.

ANTIMONY.—*Symptoms.*—Copious and obstinate vomiting, abundant stools, constriction of the throat, cramps, appearances of intoxication, prostration of strength, other symptoms of corrosive poisons, convulsions, and death.—Externally applied, it produces ulceration.

Occassions.—Tartar emetic, James' powder, antimonial wine, glass of antimony, with other prescriptions of the regulars, and Printers' type.

Tests.—Sulphuric acid, or lime water, put into a solution of tartrate of antimony, occasions a white precipitate; an infusion of nut galls, a copious yellowish white precipitate. All the preparations of antimony are readily reduced to the metallic state by calcination with charcoal and potash.

Treatment.—Give emetics of lobelia, with a strong decoction of cranesbill, witchhazle, or gall nuts; these are a chemical antidote to antimony; also the same by injections, together with mucilaginous drinks, stimulants and nerve powder.

COPPER.—*Symptoms.*—Acrid coppery taste in the mouth, tongue parched, constriction of the throat, severe vomitings, or fruitless efforts to vomit, dragging at the stomach, dreadful colic, bloody stools, abdomen distended, small quick pulse, fainting, thirst, cold sweats, convulsions and death.

Occasions.—Blue vitriol, verdigris, food cooked in copper or brass vessels, pickles made green with copper, brass cocks in beer and wine casks, &c.

Tests.—The salts of copper are mostly of a bright green or blue color; and are easily reduced to their metallic state by means of charcoal at an elevated temperature.—Ammonia in sufficient quantity, will turn any coppery solution blue.

Treatment.—Emetics and injections of 3rd preparation; followed by large draughts of water and whites of eggs, well sweetened. Also stimulants and nerve powder; and if the extremities are cold, rub them with cayenne and vinegar.

LEAD—*Symptoms.*—When taken in large quantities, a sugary, astringent, metallic taste in the mouth, constriction of the throat, pain in the region of the stomach, obstinate, painful, and often bloody vomiting, hiccup, convulsions and death. When taken gradually, it produces, emaciation, painter's, or Devonshire colic, and palsy.

Occasions.—Sugar of lead, used for a styptic—diaculum or lead plaster, white lead upon chafes and sores—painting with white lead—some kinds of water coming through lead pipe—wine sweetened with lead—glazing of earthen ware &c.

Tests.—All preparations of lead are easily reduced to the metallic state by heat. Sugar of lead has a sharp sweet taste. To test wine adulterated with lead, mix equal weights of lime and sulphur, expose to a red heat in a covered crucible, take 16 grains of this, 20 of cream of tartar, put into a small vial, fill with water, and keep it tightly closed. This liquid will produce a black precipitate from liquids that contain lead.

Treatment.—Give thorough courses of medicine. Injections should be freely used, and if the bowels are much obstructed some active cathartic should also be employed. It is said that both sulphuric acid, and glauher salts (sulphate of soda) will decompose the salts of lead in the system, and render them inert. Let it not be supposed that these articles are opposed to a *natural practice*; for they contain nothing that is not found in the ultimate elements of the human body, and are not radically poisonous; besides, to arrest a deadly chemical agent in the body, it is not absurd to use some more mild chemical substance, as a counter agent.

MERCURY.—*Symptoms of corrosive sublimate*—a-
cid metallic taste—thirst—fullness and burning in the
throat—pains in the stomach and bowels—vomiting,
sometimes bloody—strangury—pulse, quick, small and
hard, fainting, or cramps, difficult breathing—cold sweats
—and death. When it effects the system gradually or
in smaller quantity, the above symptoms may not all
appear, but then is added—salivation, and sloughing of
the gums, and flesh from the face. The other prepara-
tions of mercury are similar; but *calomel* is more mild—
producing purging—salivation—caries of the bones—
weakness—liver affections—Hypochondria—and a hun-
dred nameless disorders.

OCCASIONS.—Corrosive sublimate, calomel, red pre-
cipitate, blue pill, and unguentum of the regulars. Also
vermilion paint, wafers colored with vermilion—silver-
ing of looking glasses—and various articles whitened
with quick silver.

Tests.—Heat volatilizes it very easily and converts
it into the metallic form from any of its preparations.

Treatment.—For corrosive sublimate, albumen, or
the white of eggs, is an excellent antidote; it reduces
the poison to calomel, and should be used in large quan-
tity. But besides this, vomiting with lobelia should be
excited as soon as possible; accompanied with mucila-
gineous drinks. Where the system is impregnated with
calomel, frequent and thorough steaming, is the best
way to remove it,

MERCURIAL DISEASES.—As humbling as it may ap-
pear, many of the Regulars have actually acknowledged
a class of disease caused by mercury; such as, “Mercuri-
al ulcers in mouth,” known by large dark looking sores
in the mouth, horrid smell of the breath, teeth loosened,
and copery taste; “Mercurial disease,” much resem-
bling syphilis; this, says a regular author “is now a
common disease; and frequently confounded, by medi-
cal men, with genuine venereal diseases,”; “Mercurial
erysipelas,” characterised by heat, redness, roughness;
commencing either on the groin, inside of the thigh, or
band of the arm; extending over the body, with swell-
ing, soreness, and dreadful itching; the roughness is

caused by small pustules, which break and corrode the skin, so that the patient is almost raw from head to foot ; and sometimes occasions the loss of the hair ; "Mercurial erethismus," characterized by great depression of strength, sense of anxiety about the breast, frequent sighing, trembling, small quick or intermitting pulse, pale contracted countenance and sense of coldness. (Hooper, M. D.) "Salivation," which the regulars often purposely produce, known by an excessive flow of spittle from the mouth, soreness of the gums, looseness of the teeth which sometimes drop out, and a disagreeable, and peculiar smell of the breath. It appears to be Nature's mode of expelling the poison from the system.

EXAMPLE.—Mrs. Judge N——, was, for 15 years, under regular treatment for spinal disease, inflamed eyes, & other affections. 8 or 9 years of this time she was confined to her bed, or a dark room ; sometimes unable to speak. Her physicians had applied their usual treatment of minerals, cupping, leeching, and blistering ; and in her own language, she had taken blue pills (mercury in one of its worst forms) by the peck. We found her a perfect picture of mercurial disease, extremely weak, bloated in the limbs and body, ulceration of the throat, gums so decayed that the alveolar processes exhibited the bare bone in their whole extent ; the mouth and lips had a dark purple hue ; and were covered with a sort of tubercles. We consented, with reluctance to treat the case, after obtaining a promise of perseverance on the part of the patient and friends ; for we foresaw, that to arouse, and remove so much poison from the system, must produce unpleasant and perhaps discouraging effects. We began by giving composition, cayenne, nerve powder, and stomach pills : and every 3 or 4 days, a course of medicine. But little effect was at first produced upon her system, 7 or 8 teaspoonsful of brown lobelia being required to produce vomiting ; and teaspoonful doses of cayenne, seemed to have only an ordinary effect. After about 3 weeks, active salivation commenced, and for a long time she continued to discharge from a pint to a quart a day ; a vessel being constantly kept at her mouth. This reduced the bloating, and she

became emaciated in the extreme. For some time after this we continued to prescribe an emetic every day, per enema ; the medicine continued to have a more sensible effect, until very small doses would suffice ; the ulceration healed ; the mouth returned to its natural state ; and the salivation gradually subsided.—Winding up with the restorative and syrups, she was by the 5th month, restored to a comfortable state of health, to the surprise of all ; and now superintends her domestic concerns.

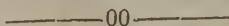
This is but one of the many cases that have fallen under our care, whose constitutions have been ruined, and life made a burden by the poisoning faculty ; and restored to health by the congenial powers of the Thomsonian remedies.

NITRE, OR SALT PETRE.—*Symptoms.*—Heart burn, nausea, painful vomiting, purging, convulsions, fainting, pains in the stomach and bowels, difficulty of breathing, a species of intoxication and death.

OCCASSIONS.—Accidentally taking it for salts, and the pernicious practice of putting it into beef, pork, and butter to preserve them. This custom is severely censured by Professor Rafinesque. Thomson, says no mineral produces a more cold effect upon the body, and none is more difficult to eradicate.

Test.—Salt petre, laid on live coals, burns with a yellow flame, somewhat resembling gun-powder, in its action.

Treatment.—Courses of medicine are amply sufficient, accompanied with a plentiful use of astringents and stimulents.



VEGETABLE POISONS.

These comprise a large number of vegetables, *narcotic* and *irritant*. In the first class, are opium, poison hemlock, foxglove, laurel, tobacco, henbane, &c. In the last, are ivy, poison sumac, parsnip, scoke, toadstools &c.

Tests.—Plants having 5 stamens (fine thread like organs, surrounding the germ, or seed pod) and 1 pistil (an organ springing from the germ,) with flowers of a dull lurid color, and disagreeable smell are usually poisonous ; as the thorn apple. The umbelliferous (having clusters of flowers on stems diverging from one point, like the braces of an umbrella) plants, which grow in wet places, have usually a nauseous smell, and are poisonous as the water hemlock. Labiate (having flowers formed like a tube, and opening with a mouth,) plants containing their seeds in a capsule, are often poisonous ; as the foxglove. Also those which contain a milky juice, unless compound flowers (composed of many little florets, like the dandelion.) Such as have horned or hooded nectaries (organs generally containing honey) are mostly poisonous. Care, in studying the nature of plants, and banishing poisonous ones from our yards and steets might save many lives.

OPIMUM.—*Symptoms.*—When taken in large quantities, dizziness, tremors, convulsions, sometimes vomiting, delirium, stupor, loud breathing, and fatal apoplexy. In smaller doses, it produces nervous insensibility, intoxication, spasms, and a variety of uncertain effects.

Treatment.—Large doses of 3rd preparation, or lobelia in some form. In cases of narcotic poisoning, it requires 5 or 6 times the usual quantity of medicine, supported by a cautious, but thorough application of heat or a warm vapor ; and rubbing the surface briskly with salt vinegar and cayenne. Striking the soles of the feet, and dashing cold water over the body, have each been found successful in restoring persons from the stupor of opium.

OTHER NARCOTIC POISONS.—*Symptoms, and Treatment,* the same in general principle as those for opium.

IVY &c.—*Symptoms.*—Swelling and scabby eruptions of the surface.

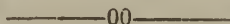
Treatment.—The tincture of lobelia, used as a wash, is probably the most sovereign antidote for these poisons, known. Full courses of medicine should be given in bad cases. Copperas (sulphate of iron) water has a decided effect, as a wash, in arresting them.

OTHER IRRITATING POISONS.—*Symptoms.*—Pain, inflammation, ulceration, vomiting &c

Treatment.—Most of these when taken internally, require vigorous courses of medicine. Acids have formerly been considered very essential for vegetable poisons, and alkalis for those that are mineral.

ESSENTIAL OILS.—These are sometimes taken in such quantity as to destroy life.

Treatment.—Give alcohol, or fourth proof brandy, sufficient to cut the oil; and at the same time an emetic.



VENOMOUS BITES.

Symptoms.—Pain, inflammation and swelling of the part bitten; extending over the body—stagnation and putridity of the blood, hæmorrhages, and various nervous phenomena. Sometimes a sudden and easy suspension of all the animal powers.

Tests.—Serpents which have fangs, or long hooked teeth in the upper jaw are poisonous; as the rattle-snake and copper-head. Those which have several rows of even teeth, and take their prey by twisting around it are harmless; as the black snake and anaconda.

Treatment.—Since these misfortunes are generally encountered remote from medical aid, it is very fortunate that the most immediate, and effectual cure known, is simply the suction of the bitten part by the mouth.—if the patient is alone, and cannot reach the wound with his mouth, let him rub it with urine or spittle, and then wash it faithfully with cold water; squeezing out the blood at the same time. The plan of treating venomous bites by suction, is very ancient, though but little known. If the mouth is rinsed afterward, it will do no harm to the operator, unless he have a sore in his mouth, and perhaps not then, for the structure of these subtle poisons are so fragile that, as it appears, almost any chemical agent, as common salt, or spirit, will decompose them. Dr. Worthy states that lobelia, applied internally, and externally has often cured the bite of the

rattlenake, and the copperhead, at the South. Spirit of hartshorn is a good antidote for animal poisons.

—00—

ACIDS AND ALKALIES.

These are sometimes taken by accident in such quantity as to destroy life.

Treatment.—The mode of practice in these cases, should depend upon the chemical law that *acids and alkalis neutralize each other*. If a person has swallowed an acid, give calcined magnesia, salætatus, or weak ley; and cause vomiting with lobelia. If an alkali, give vinegar and lobelia.

—00—

MILK SICKNESS.

SYMPTOMS.—Weakness, pain and soreness in the legs, disagreeable sickness at the stomach, and trembling in walking.

After a time they increase in violence, attended with vomiting, retching, distress and burning sensation in the stomach, costiveness, a peculiarly disagreeable breath, remitting fever, appearances of inflammation of the brain, and death.

Cause.—This disease, found in several parts of the Western States, is caused by eating the flesh, milk, or butter of cattle that have eaten some poisonous plant.

Treatment.—Vigorous courses of medicine; using the vinegar tincture, and vapor bath freely. Give pepper sauce plentifully; this, in conjunction with lobelia and steam, has been very successful.

—00—

CHOLERA MORBUS.

SYMPTOMS.—Coming on with little warning—com-

mening with nausea oppression at the stomach—and griping pains in the bowels;—soon followed by excessive vomiting and purging—prostration—thirst—purging of blood, and cold extremities.

Cause.—This disease is closely allied to poisoning, not only in its sudden vomiting and purging, but in being caused by unripe fruits and vegetables—large draughts of cold water and other improper things in the stomach. Sometimes the effect does not follow until 24 or 48 hours. Warm weather favors its production.

Treatment.—Give freely of composition, or cayenne and bayberry, with an occasional dose of No. 6; followed by an emetic, or full course of medicine. Chicken, or beef soup is very good to allay the vomiting, and restore the natural action of the stomach and bowels.—It should be remembered that steaming has much influence over excessive vomiting. Keep the feet warm with steaming stones, bathing in hot water, or cayenne and vinegar. But do not rely too much upon palliatives, Give the alimentary canal a thorough cleansing with emetics and injections. Afterward use the dysentery syrup, and a careful regimen. A drink made of the peppermint herb, with a little soda or saleratus, is an excellent remedy, and in mild cases will cure it alone.

CHAP. IX.

INJURIES.

CUTS AND BRUISES.

Wounds are divided into several classes, as follows .

1st. **INCISED WOUNDS.**—made with a knife, or some other cutting instrument. When these wounds occur without severing an artery of any importance, they should be washed with cold or slightly warmed water ; bringing the edges together, and fastening them there with strips of sticking plaster. Afterward, the borders of the wound may be bathed with No. 6, tincture of myrrh or balm of gilead ; and then firmly bound up with strips of linen. If the bleeding does not cease, after closing it up, sprinkle the wound with flour of slippery elm. If inflammation follows, keep it wet with cold water, occasionally applying No. 6.

When an artery is cut, the blood that flows, is of bright scarlet color, and springs out in jets corresponding with the beat of the pulse. These frequently require to be taken up or tied. But previous to attempting this, an effort must be made to stop the blood by other means : 1st by *positon*, if the wound is on the hand or arm raise it above the head ; if it is on the foot or leg, lay the patient on the floor, and lift the foot upon a chair ; if it be on the body below the heart, elevate the hips above the head ; or if it be on the body above the heart, let the patient sit upright. The object is in all cases to get the wound as high as possible above the source of circulation. This was introduced by Thomson, and will in many cases very nearly stop the bleeding of itself. The next means, is *compression*. If a large artery be cut

upon the leg or arm, pass a handkerchief around it above the wound, tie it loosely, put a stick between it and the limb, and twist it firmly until the blood stops.— If the wound be too high up for this, press hard upon the groin, with the ring of a door key, if it be on the thigh; or above the collar bone, about mid way, bearing downward upon the first rib, if it be on the arm.— By these means any person may preserve a patient from bleeding to death untill a surgeon arrives; and a little further knowledge may often dispense with him altogether.

To tie an artery, take a small pointed hook (one may be prepared by sharpening the end of a knitting needle, and bending it,) or a pair of forceps of suitable size; unloose the handkerchief by a few turns of the stick; the flow of the blood will show the place of the artery; seize it with the hook or pinchers; draw it out, and tie it with a waxed uncolored thread. The smaller arteries may be closed by twisting them.

To sew up a wound, for they cannot always be held together by sticking plaster, wax together several threads of white sewing silk, or uncolored linen, so as to make one of sufficient strength, cut it into pieces, of a length that may be doubled in the needle and tie easily; and as many as there are stiches to be taken. Then with one, arm a common needle, pass the point through the skin at a little distance from the edge of the wound, and out at the same distance on the other side; cut off the needle, thread it again, and take another stitch leaving the ends of the thread loose until all are taken; finally tie them, bringing the edges of the wound evenly together, and taking care to tie the knots on one side.

2nd. PUNCTURED WOUNDS—made with pointed instruments, and leaving only a small opening. These, although sometimes apparently unimportant, are apt to result in locked jaw and other dangerous consequences. The plan of treatment, is to keep down the inflammation, by moist applications, and cause the wound to heal from the bottom upward. For the first object, keep the wound covered with wet cloths, or a slippery elm poultice. For the second, wax a strip of linen, twist it to a point and introduce

into the puncture to a suitable depth, and renew it daily. If nervous symptoms, or locked jaw appear, immerse, or bathe the part in weak ley, and give lobelia; this is infallible.

3rd. *Contused wounds, and lacerations*—caused by blunt bodies, musket balls, and parts being violently torn asunder. They seldom bleed much. These, as well as all other wounds must be freed from dirt, hair, or any extraneous matter that may be driven into them; with cold or luke warm water, wash away all clotted blood, and close the surfaces with sticking plaster. If the bleeding is not stopped, sprinkle it over with slippery elm flour, or instead wet it with a strong astringent; then cover it with a compress of wet cloth, bound on, and kept wet. If inflammation appear, wash with weak ley, followed, by No. 6.

WOUNDS OF JOINTS AND TENDONS.—These are difficult to treat, and often dangerous. An opening into the cavity of a joint, lets out the synovial fluid, which is extremely debilitating. To prevent this, keep the incision uppermost, and bind it in such a manner as to bring the wound together. A thick slippery elm poultice made with a strong astringent decoction, should be kept on it. A fluid like the joint water sometimes flows from wounds of the tendons. Wash with astringents, and apply the above poultice.

WOUNDS OF THE HEAD.—These are often dangerous, not only from the injury, but the surgeon, Dr. Beach, says, "Formerly, it was very fashionable to *trephine* for even very trivial injuries of the head. I think it has killed *ten* where it has cured *one*; and I am not surprised that Desault, in the last years of his practice, should abandon the use of the instrument altogether, in consequence of the fatal effects which followed its use." All that should be done surgically in fractures of the skull, is to elevate any depressed portion, when it can be done, and take away detached portions. Besides, a treatment to subdue the inflammation, and the work of nature will accomplish much more than is generally supposed.

Remark.—Thousands of limbs and lives have been de-

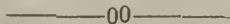
stroyed by surgeons, where a simple natural or Thomsonian treatment might have saved both.

BRUISES.—These are occasioned by falls and blows from various means, and leave a purple or black and blue appearance. If the surface is not much broken, bathe the part well in weak ley, and afterward apply No. 6, liniment, or tincture of myrrh. This may be followed by a fomentation of wormwood or tanzy; or cloths wet in cold water; giving No. 6 or composition.

The principal philosophy in treating all injuries that inflame, consist in the evaporation of water from the part; it not only carries away the heat, but opens and mollifies the vessels, and promotes healing.

Many surgeons, though very skillful with their instruments, are miserably deficient in their after treatment, and many a limb and life has been lost simply for the want of water. Dr. Armstrong, an experienced physician of London, who had seen several deaths from the ignorance of physiology in surgeons, says “No surgeon, unless he be a good physician, can understand the after treatment, when inflammation occurs. A surgeon who takes a mere external survey of the body, is really a very dangerous character.”

If a person is bruised so as to be stunned, apply a treatment similar to those under the head of “Suspended Animation.”



FRACTURES AND DISLOCATIONS.

A **FRACTURE**—is known by the sudden pain—and inability to move the part, naturally—by running the finger along the bone; and sometimes by the limb being shortened;—but the most certain sign is the *grating* of broken ends, when the different parts are moved. This should not be mistaken for the *crackling* noise, that sometimes occurs in dislocations, occasioned by the escape of the joint water into the surrounding tissue.

The replacement of a broken, or dislocated bone, would be an easy task, were it not for the contraction of

the muscles, which hold the parts firmly in their unnatural position. These contractions were formerly reduced among the regulars, by *pulling*--often requiring the strength of several men, besides straps and pulleys.—But Thomson introduced a new era in to the art of bone-setting, which has received the highest encomiums from those regulars who have shaken off their prejudice. His plan consists in wrapping up the injured part in several thicknesses of cloth, and pouring on warm water until the muscles are well relaxed; at the same time giving lobelia so as to nauseate thoroughly. These means will relax the system and enable any common person replace a fracture with ease. But if the bones have not slipped by each other, or the contraction be not strong, this trouble will be unnecessary.

Fractures of the thigh and arm, require an angular concave box or splint, the angles to correspond with the knee, or elbow. They may be made of wood, tin, or binders paste board; should be lined with a compress of tow or cotton; and applied with bandages in such a manner as to secure a uniform motion to both parts of the limb. Support the fore arm in a sling, and the leg on a pillow.

Fractures of the leg and fore arm, require long narrow splints of wood, or strips of past board. Sometimes a part of the bandage should be put on before the splints.

Fractures of the jaw, require a compress put in the angle of the jaw, and a bandage carried over the head. Nourishment must be sucked between the teeth.

Fractures of the collar bone, require a compress put in the arm pit, a bandage carried over the opposite shoulder, and the fore arm put in a sling.

A strengthening plaster may be applied with advantage to some fractures. The bandages and compresses should be occasionally wet with No. 6. and water, or a vinegar tincture of hops and wormwood. The bandages should not be too tight.

“All that art can do toward the reunion of a fractured bone, is to lay it perfectly straight in its original position, keep it easy, and moderate excessive inflammation.—

All tight bandages are injurious. It is in this way that excess of art does mischief. Indeed, fractures may be successfully treated without either the use of splints or bandages."—*W Beach M. D.*

A DISLOCATION, may be known by the deformity of the joint, compared with that of its fellow; by the limb being longer or shorter than usual; by the pain and inability to move it; particularly in certain directions.

Dislocation of the shoulder, is the most common accident of this kind and very easily reduced. After relaxing the system, as before described, bend the elbow to a right angle, place the left fist, or ball of yarn in the arm pit, seize the arm near the elbow, and use it as a lever to move the head of the bone into its socket.

Dislocation of the jaw. Put 2 corks between the double teeth, and press upward on the chin.

All other large joints may be set without difficulty, by first relaxing the system, then bending the limb as much as convenient, judiciously move it in different directions, and with the right hand guide the bone into its place. It is the latter principle that has given such celebrity to the "Sweet Family," as bone setters.



BURNS AND FREEZES.

The great remedy recommended by Thomson for burns, is cold water. Although it has been used for this purpose through all time, it is strange that so few know the extent of its virtues. It must be evident to an experimental physiologist that nothing in nature can be more appropriate for a burn than cold water. It prevents the determination of the blood to the part; it carries off the superabundant heat; and at the same time it relaxes the cuticle and restores the suspended functions of perspiration; thus, preventing the collection of serum and perspirable matter between the cuticle and the skin, prevents blistering; and when the cuticle is destroyed it is the best artificial substitute. When a person is burned or scalded, never stop to take off the cloths, but dash on

the cold water ; wrap up the part in a wet towel, and continue to pour on cold water as often as the smarting returns. Spirits of turpentine, is a favorite remedy with the regulars, and produces some little good, by its relaxation ; it is a harsh remedy alone, when the skin is broken, but it may be useful where the parts are seared, previous to applying cold water. When the smarting has ceased, apply a mixture of sweet oil and balsamfir, or sweet oil and lime water shaken together, then cover it with a poultice of slippery elm and ginger. Whenever the poultice is renewed, cleanse the sore with soap suds, and afterward wash it with a tea of red raspberry or some other astringent.

Freezes produce an effect similar to burns and require the same treatment. If they are warmed suddenly, mortification is apt to follow. Put the parts into cold water for sometime ; then poultice, &c. Both in burns and freezes, the patient should take some warming medicines.



CHOKING.

This too often occurs from eating beef and other food that is not sufficiently cut and chewed, When there is food lodged in the throat, look into the mouth, and if it can be got hold of, seize it with the fingers or a pair of slender pincers, and pull it out ; if this cannot be done, attempt to thrust it down with the finger ; this, if it does not succeed, may cause gagging or vomiting, and by that means throw it up. If still unsuccessful, let the patient gurgle in his mouth and throat, some lobelia, prepared in a mixture of castile, or soft soap, in order to produce relaxation, and vomiting ; an enema of lobelia may be given for the same purpose. Then take a candle, and warm it to make it flexible ; or a peice of whale bone or wire suitably crooked, with a piece of candle wicking or cloth wound around, and fastened to the end, and oiled and carefully push the substance down the throat. If fish bones, pins, or anything that would be dangerous to

pass into the stomach, stick in the throat, fasten several loops of thread to the end of a piece of whalebone or wire, pass them below the substance, and by bringing them up again it may be brought up ; or, after a loop has caught it, twist it, by turning the handle, until it is the offending substance is fastened ; then it may be moved in any direction. A sponge fastened in a similar way, passed below the substance, and then saturated with water, has been successful. Striking the patient smartly upon the back has sometimes thrown up articles that lodged in the gullet ; but this is still more successful, if they are in the windpipe ; in which case, the breast and back may be struck simultaneously, after the patient has inflated his lungs. Sneezing or coughing may be excited in the latter case.

CHAP. X.

[NERVOUS DISEASES.—Acute.]

SPASMODICS.--Acute.

HYSTERIA.

SYMPTOMS.—This disease is considered peculiar to females ; and appears in such a great variety of forms as to be difficult to describe. It comes on with paroxysm, or fits ; sometimes preceded by depression of spirits,—anxiety of mind—affusion of tears—difficulty of breathing—sickness at the stomach—and palpitation.—Frequently there is a pain felt in the left side, with a sense of distension extending upward into the throat, and occasioning a sensation as if a ball were lodged there. The disease having arrived at its height, the patient appears to be threatened with suffocation—becomes faint—stupid—convulsed—with alternate fits of laughing, crying, and screaming. When the paroxysm subsides, a quantity of wind escapes from the stomach with frequent sighing and sobbing, and the patient, recovers without a recollection of what had occurred.

Sometimes there are no convulsions, and the patient sinks into a peculiar insensibility.

Sometimes it is attended with violent hiccough. And sometimes other slight spasmodic affections, wholly form a fit of hysteria. A laughable fear of death often attends it.

Causes.—Sudden grief, fear or joy—menstrual irregularities—luxurious living—crowded and heated apartments,—sedentary habits—indigestible food—worms—suppressed perspiration, and diseases of the spine, uterus, and ovaria.

Treatment.—Mild case may be removed by bathing the feet in hot water, and drinking freely of stimulants, and nervines—composition and nerve powder, or penny royal and motherwort. In more violent cases give an active emetic, and if necessary a full course of medicine. If there is a determination to the head, use injections freely. Afterward make a plentiful use of the female restorative; occasionally taking light courses of medicine.

Regimen.—Use neither a high or low diet—find cheerful occupation—bathe frequently—exercise much in the open air, *particularly on horseback.*



SPASMS AND CONVULSIONS.

SPASMS, are a fixed contraction of the muscles; remaining sometime, gradually, or suddenly subsiding, and frequently attended with danger. A serious kind called *cramp in the stomach*, is caused by offending food, drinking cold water in hot weather, gout translated to that organ, and other irritants of the nervous system. Another very dangerous kind, is a spasm of the larynx in a species of croup. An unimportant kind, called cramps in the legs, occur generally in the night.

CONVULSIONS, are alternate spasms and relaxations of one or more muscles of the body, producing various contortions, and involuntary motions. They are symptomatic of various diseases; and frequently attend the irritation from indigestible substances and worms in the intestines of children.

Treatment.—In this department we need to say but little more than that lobelia is the most infalible anti-spasmodic known; as it not only relieves the effect, but removes the cause. In spasm and convulsions of the more violent cases it should be given in the form of 3rd preparation; and by injection as well as otherwise. Besides the effected parts should be thoroughly rubbed with some preparation of cayenne; and if necessary be

followed by the vapor bath, or fomentations of bitter herbs, particularly hops.

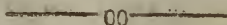


LOCKED JAW.

SYMPTOMS.—Generally commencing gradually, with stiffness in the neck—distress in the stomach—and difficulty of swallowing—at length the muscles of the jaws become rigidly contracted and the teeth firmly set together; with spasms of many, or all of the muscles of the body; and occasionally convulsions. Sometimes the symptoms all come on suddenly. It occasionally continues from 5 to 10 days; and generally subsides gradually.

Causes.—Mostly wounds that injure the tendinous parts, particularly punctures in the hands or feet.

Treatment.—The *preventive means* are indicated by the observation, that, when wounds are indolent—or not attended with inflammation and suppuration—efforts of nature that locked jaw occurs; therefore we should, in those cases, apply stimulants and fomentations; with warming medicines internally. When the disease occurs after surgical operations, and gunshot wounds, it has been generally fatal under regular treatment; but it invariably yields to lobelia, and the vapor bath. Give the 2d preparation of brown lobelia and cayenne in large doses, until the injured part is weak, lay, as hot as can be borne, and immediately apply the vapor bath.—Infusions containing lobelia and cayenne, should not be checked. When the vomiting subsides, continue to give lobelia, in nauseating doses, once in 2 hours, until all spasmodic symptoms subside. Also, make a liberal use of lady-slipper or scull-cap, as a common drink. Keep up a perspiration.



PALPITATION OF THE HEART.

This is distinguished by a rapid and irregular beating

or fluttering of the heart. It seems to be produced by an irregularity of the nervous circulation; and is mostly symptomatic of fear, weakness, hysteria, dyspepsia, sick head ache, &c. In some cases it attends organic derangements of the heart.

CAUSES.—Strong tea and coffee, tobacco, violent exertions, sedentary habits, excessive sensuality, and any debilitating habit. Also, the use of opium, mercury, and other mineral poisons.

Treatment.—To relieve a paroxysm, take a dose of No. 6 and nerve powder; and if the appetite be deficient, or the stomach be deranged give a course of medicine; followed by a use of poplar, bayberry, balmony, golden seal, unicorn, or the spice bitters, or female restorative.

Regimen.—Much is depending on this. Avoid all debilitating indulgences, tobacco, tea or coffee, and poisons. Use coarse bread; bathe frequently; and exercise much in the open air. Without preventing it, enlargement, and other diseases of the heart may ensue.

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WATER BRASH.

SYMPTOMS.—Pain and spasm in the stomach, mostly when it is empty, followed by a discharge of watery fluid, often tasteless, but sometimes acrid.

Treatment.—Take a dose of composition before eating; 2 or 3 stomach pills after, and from 4 to 6 of the bile pills at night.

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HEART BURN.

SYMPTOMS.—Uneasy sensation in the stomach, anxiety, difficulty of breathing; and particularly acrid and burning eructations from the stomach into the throat.

Causes.—Oily food, costiveness, and indigestion.

Treatment.—Soda or Salæratum will be found to be a present relief; but a cure must be sought in the use of the

stomach, and bile pills, an apparient diet, courses of medicine ; and such other means as will restore the digestive powers.

Regimen.—When heart burn is discovered, fast one or two meals, and avoid greasy food.

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HICCOUGH.

This well known affection, is sometimes very troublesome. To remove it, take a small dose of the tincture of lobelia ; or eat a few peach kernels, or bitter almonds. A sudden fright, or even a drink of cold water will sometimes remove it. In bad cases, give tincture of peach kernels and No. 6 with a little soda.

CHAP. XI.

NERVOUS PAINS.

NEURALGIA.

SYMPTOMS.—This disease is characterized by a most excruciating pain that seems like the cutting of a knife, and darts along the course of the nerves with the rapidity of lightning. It mostly affects the face, and seems to rise about the angle of the jaw ; but it sometimes attacks the neck, breast, legs and other parts. It comes on in paroxysms ; and sometimes returns periodically every day, like an intermittent. When it is very severe, or has continued sometime, swelling, and tenderness arise in the affected part.

Causes.—Tea and coffee used to excess, sedentary habits, excessive sensual indulgence, exposure to cold and any injury of the nerves.

Treatment.—Courses of medicine, sometimes cure it promptly. Steaming and fomentation seldom fail to relieve it. Bath the parts with No. 6. to which add a 1-4 part of spirits turpentine ; also take a teaspoonful of the same mixed with sugar from 3 to 6 times a day.—Tonics have been found very beneficial ; and seem to be particularly indicated in the periodical species,—use the the spice bitters or female restorative.

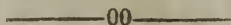
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SCIATICA OR HIP DISEASE.

SYMPTOMS.—A neuralgic pain, perceived at first in the knee ; but the seat of the difficulty lies in the sciatic nerve, near the joint of the hip. At length the hip be-

comes affected with excessive pain, swelling, tenderness and sometimes, dislocation of the joint.

Treatment.—The same as for neuralgia, excepting that the hip bath may be used. A thorough, prostrating operation of lobelia per injection, has been known to work wonders in this case.



BILIOUS COLIC.

SYMPTOMS.—This disease is generally preceded by general derangement, costiveness, and symptoms of fever; followed by nausea, vomiting of bilious matter, sharp cutting pain in the bowels, which at length become inflamed and tender to the touch. It is attended with a spasmodic constriction of the bowels, so that their contents cannot move; and a jaundiced complexion.

Cause.—Probably some derangement of the liver.

Treatment.—A vigorous course of medicine, with a free use of brown lobelia in soap suds, used by injection, will cure it if seasonably applied. If after this, the bowels have not sufficiently moved, give a dose of castor oil the cathartic pills or some other safe cathartic; but see that the system is previously well relaxed. In the meantime fomentations of hops or other bitter herbs must be applied to the bowels. If the symptoms continue, persevere with the courses of medicine, using soda, sælærat, or weak ley, with the emetic; but beware of giving too freely of cathartics; an active dose for a strong person is enough; its operation must be aided by the ordinary Thomsonian medicines. Much will be gained by persevering fomentations, washing the abdomen occasionally with weak ley. If it be very obstinate, give the injections, containing a large dose of brown lobelia, nearly cold, so as to be retained as long as possible, apply a lobelia poultice to the bowels and endeavor to produce prostration.

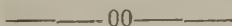
FLATULENT COLIC.

SYMPTOMS.—Commencing with symptoms of distension, and uneasiness in the stomach, or bowels; soon

followed by a peculiarly distressing and sickning pain, which continues to increase until it becomes very severe, then subsides more or less ; and so continues its paroxysms of pain and ease ; the times being various in different cases. During the paroxysm of pain, the patient leans forward and presses his abdomen with his hands, which mitigates its violence. Occasionally more or less wind escapes from the stomach, or bowels, attended with a relief of pain. The bowels are torpid, and the tongue covered with a white fur.

Causes.—Indigestible food, unripe fruit, sudden check, of perspiration, and costiveness. Some persons are predisposed to it. It is most common with children.

Treatment.—Drinking freely of a tea of cayenne composition, ginger, or some aromatic herb, will often relieve it. Essence of peppermint is very good ; but care must be used in giving it to children. If these means fail, give a treatment similar to that for bilious colic.



TOOTH ACHE.

In severe cases, the most effectual way is to have the offending tooth extracted, but oftentimes, the preservation of the tooth is desirable ; and other circumstances render extraction not advisable.

Treatment.—Fill the cavity with cotton moistened with oil of summer-savory, cloves, or some other essential oils : drink freely of composition, apply a flannel to the face, wet with vinegar and cayenne, get into a bed and take a sweat. This will often cure for the present. When the pain is caused by an inflammation of the socket of the teeth, fill a small muslin bag with cayenne, and put it between the teeth and the cheek. To kill the nerve of the tooth, fill the cavity 2 or 3 times a day with oil of cloves, or the juice of the root of the yellow daisy (*ranunculus*.) Filling the cavities with gold, is a well proved preservative ; but beware of the composition which some dentists use, for it will gradually taint the system with mercury—also the arsenic which they

use to destroy the nerves of the teeth—kreosote, too, which has several times destroyed life.

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SICK HEAD ACHE.

SYMPTOMS.—These are various, sometimes commencing, with langour—cold feet—confusion of mind—dimness of sight—pain in the head, sometimes confined to one side—loss of appetite—inactivity of the stomach and bowels—disagreeable nausea;—continuing for 1 or 2 days, and frequently terminating in vomiting, followed by sleep; which is succeeded by a soreness and disagreeable feeling in the head, that gradually subsides. Many persons are peculiarly subject to it; in some it is periodical, in others it comes on at irregular intervals.

Causes.—Peculiar state of the nervous system, tea and coffee, too much greasy and animal food, studying with a full stomach, and anything that weakens and disturbs the nervous power.

Treatment.—Take an emetic, followed by an injection; and a protracted use of the hip bath, with a cloth wet in salt water applied to the head. Afterwards, take 4 or 6 of the bile pills 2 or 3 times a day, with the spice bitters before eating. This treatment, applied on the first symptoms of the attack and supported by habits calculated to avoid the exciting causes, and wisely husband the vital force, will, in time, fortify the constitution against this distressing malady.

Regimen.—Stimulating and desirable food should be used, providing it be easy of digestion: Salt codfish and pepper sauce, will relieve it alone.

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VARIOUS SPECIES OF HEAD ACHE.

The common, consisting generally of a pain through the temple, and increased by a change of position, is caus-

ed by taking cold, loss of sleep, indigestible food, fasting &c. It may be removed by a free use of composition and stomach pills. A tea of the sweet scented golden rod is recommended by Thomson.

Pain in the brow, at the root of the nose, consisting of an inflammation in the mucous membrane that lines the cavity there, communicating with nose, is caused by taking cold.

Treatment.—Use the vapor bath, and catarrh snuff.

Hysteric head ache, consisting of sharp and capricious pains in different parts of the head, unattended with appearances of inflammation or congestion.

Treatment.—Remove the cause. See hysteria.

Pain in the head, from inflammation, and congestion.

Treatment.—See inflammation of the brain, and apoplexy.

[PROPOGATED DISEASES—Acute.]

CHAP. XII.

CONTAGION S--A c u t e.

SCARLET FEVER.

SYMPTOMS.—Commencing with languor, chilliness, pains in the back and head ; followed by a hot and dry skin, and sometimes nausea and vomiting. In about 2 days a scarlet eruption appears on the face and neck, and in the course of 24 hours, diffuses itself over the whole body. The eruption is like the color of a boiled lobster ; and not raised above the level of the surface, more visable in the evening than in the morning. The face is usually swelled and sometimes the throat is sore. The pulse is quick, and the tongue is covered with a white coat in the middle, but the point and edges are of a deep red color. Delirium sometimes occurs in the evening. In 5 or 6 days the eruption subsides, accompanied with a scaling of the surface.

But it often appears in a more violent form ; when the throat becomes red and much inflamed, voice hoarse swallowing painful and difficult, skin very hot, tongue red and dry, thirst great, the eruption comes out irregularly, and not untill the 3rd or 4th day. If the fever, and inflammation is not checked, little grayish ulcers form in the throat, and render the breath offensive. It is sometimes followed by dropsical symptoms.

FAVORABLE.—The eruption coming out uniformly over the surface in the begining ; towards the close, a moist and clear tongue, pulse more full and regular, returning appetite, and the cuticle falling off in scales.

UNFAVORABLE.—Eruption assuming a dark livid color,

small feeble pulse, involuntary discharges from the bowels, bleeding from the mouth, nose, or other passages, purple spots on different parts, prostration, stupor, and constant delirium. The canker occasionally makes great inroads, and destroys the hearing or sight.

Cause.—Undoubtedly contagion, but governed by such unlimited conditions, that, there is but little use for persons to endeavor to avoid it, who remain in the infected district.

Treatment.—In all ordinary cases, if some mild and constant means be taken to keep up a perspiration, if the patient take several times a day of composition and stomach pills ; and if the case be rather bad, every other day a course of medicine, and keep warm and well covered, there will be but little danger. In this class of diseases, cathartics are not admissible ; but on the contrary, their secret of cure depends upon a constant determination to the surface. See that the bowels are kept open with injections. Much advantage will be found in the following medicine ; salt and cayenne, each 1 teaspoonful, vinegar 2-3 of a cupful, giving every hour from 1-2 to 2 tablespoonfuls, according to the age of the patient ; for infants, it may be diluted with warm water.

When it assumes a putrid and malignant character, vomit the patient frequently with the 3rd preparation, keep a steaming stone to the throat ; give of myrrh, and bayberry 1 teaspoonful each, and cayenne 1-2 teaspoonful, steeped in hot water, 1 or 2 tablespoonfuls every hour, alternating with the salt and vinegar dose. Steep the same in tar water and use it for injections.—To abate the fever, sponge the surface occasionally with weak ley.

A gargle of vinegar and water, honey, cayenne, gold thread, and alum, may be used to rinse the mouth : and be applied with a swab.

When dropsy follows it, use the vapor bath, diuretics, and cough balsam.

Regimen.—Give light palatable food ; neither starve the patient, nor give too much. Make it a point to restore the appetite, and supply it as soon as possible.—Two patients with the same disease should not be kept

in the same room ; and the air must be kept pure.—When convalescent, take care against cold, else dropsy is endangered.

Examples.—In 1840 this disease prevailed in this and the adjoining towns. The Regulars lost 60 cases. Out of 140, but 1 died under our treatment. During the past summer, the Regulars attended 2 cases in the family of Esq., Kellogg. One died of the supervening dropsy. The other was dispaired of from the same cause. We were called ; and found the patient with so much water in the chest as to be unable to lie down, or even recline ; and supporting his body with his hands, in a most uneasy posture By the means of constant sweating the use of diuretics, and the congh balsam, the patient, an intelligent little lad, was snatched from the brink of the grave, and is now well.

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PUTRID SORE THROAT.

SYMPTOMS.—Shiverings ; anxiety ; nausea ;—followed by heat ; restlessness ; thirst ; hurried breathing ; flushing of the face ; redness of the eyes ; stiffness of the neck ; soreness of the throat and hoarseness. The back of the mouth has a fiery redness ; with some slight swelling, but not much difficulty of swallowing. After a little time, grayish, aphthous specks appear in the throat, which spread, assume a darker hue ; new ones appear, and at length the whole fauces are covered with thick sloughs. Little vesicles appear on the inside of the lips, which break, and excoriate ; and a corroding humor flows from the nose. About the 2nd, or 3rd day, patches of a dark red color make their appearance on the face and neck. The tongue is covered with a dark fur ; the breath offensive ; the pulse small, weak and irregular ; and other typhus symptoms appear. These symptoms are sometimes milder, and sometimes much more aggravated.

Cause.—The same as that in scarlet fever, of which it seems to be a variety.

Treatment.—Keep up a perspiration. Give courses of

medicine. Apply the stimulating poultice to the throat; and other treatment similar to that for scarlet fever.

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MEASLES.

SYMPTOMS.—Commencing with head ache; chills; followed by feverish symptoms; hoarseness; difficult breathing, dry cough; drowsiness; redness of the eyes; and thin watery discharges from the eyes and nose; vomiting; and sometimes convulsions. The tongue has a white coat, and the breath is offensive. On the 3rd or 4th day an eruption appears, resembling flea bites, which run together and form patches. The rash disappears in 3 or 4 days, accompanied with a scaling of the cuticle. In severe cases, the face and eyes are much swollen, the tongue brownish, and the rash of a dark color—sometimes called black measles.

FAVORABLE.—The eruption appearing on all parts of the body; with little swelling, or canker.

UNFAVORABLE.—Striking in of the rash; copious diarrhœa—hemorrhages and a pallid or livid color of the skin.

Cause.—Contagion;—taking effect in 6 or 7 days after exposure.

Treatment.—Make a drink of the black cherry bark, saffron, and sage, and use it freely. If the case be bad give a treatment like that for scarlet fever. Use canker medicines freely; and keep the surface warm and moist untill safely well; for a cold in this disease is apt to be followed by dangerous affections of the lungs, eyes, or some other part. Thomsonian treatment is almost infallible here.

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SMALL POX.

SYMPTOMS.—Chills; fever; pains in the back, head and stomach; soreness of the throat; thirst; vomiting;

and tongue covered with white fur ; which gradually assumes a bright red color. On the 3d day, an eruption of small red points appear. These, on the 1st and 2nd days, are hard, globular, and painful. They enlarge gradually, and on the 3rd 4th and 5th days, contain a little yellowish fluid ; the intervening spaces becoming red. On the 6th and 7th days, the pustules are distinguished by central indentations on their tops. On the 9th and 10th days, the indentation disappears, and they present a full rounded appearance. On the 11th and 12th days, they begin to dry up, and are followed by hard scabs, which fall off, and leave the skin of a brown or red color. The face and eyes are often much swollen.

FAVORABLE.—When the pustules are "seperate, and if the case is reasonably treated, the termination is generally favorable ; this is termed the *distinct* species.

UNFAVORABLE.—When the pustules run into each other, forming large patches, the case is severe ; this is called the *confluent* species ; and is frequently followed by putrid symptoms, such as a dark tongue, livid spots, bleeding from the eyes, mouth and other parts.

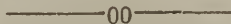
Cause.—Contagion ; easily avoided, by shunning a close approach to patients ; or a contact with any thing that comes from them. It takes effect in 12 or 14 days.

Treatment.—This disease seems to be very much modified and in some cases almost destroyed, by thorough steamings at its commencement. A course of medicine will be required every 2 or 3 days supported by a constant use of composition. For a constant dose, in bad cases, steep myrrh, and bayberry a teaspoonful each, and one half teaspoonful of cayenne, in a cup of vinegar and water ; sweeten, and give 2 or 3 swallows every 1 or 2 hours. Also 2 or 3 stomach pills 3 or 4 times a day, washed down with a glass of tar water.—Raspberry, or some pleasant astringent should be used as a constant drink ; the berries and leaves of the sumac infused and sweetened, are very fine. Let the surface be daily washed over with warm water made a little alkaline ; taking care that the patient is kept warm at the

same time. If the pustules ulcerate, dress them in a liniment of olive oil and lime water. Cathartics must not be used, but the bowels must be daily moved with injections of tar water &c.

To prevent pitting, wet the face in starch, made sticky with a little molasses; then cover it with several thicknesses of gold leaf. This, when applied in season, has been quite successful.

If the face become badly swollen, cover it with a slippery elm poultice. When convalescent, give the bitters.



VARIOLOID.

SYMPTOMS.—This appears to be a species of the small pox; but it runs its course in about half the time of that.—The pustules begin to dry by the 4th or 5th day, and soon fall off, without being accompanied with a secondary fever as in the small pox; and seldom leave permanent pits.—The symptoms are more variable; the pustules often appear in successive crops; and it is generally much more mild than the small pox.

Cause.—Contagion.

Treatment—Very similar to that for small pox, where the case is severe; but in many cases, composition and stomach pills 3 or 4 times a day, will be sufficient.



KINE POX.

This disease was originally derived from the udders of cows, is very mild, yet so near like the small pox, as to generally prevent its introduction into the body wherever it has preceeded it. The objections lately raised against it, seem to be mostly founded on the fact, that the matter by which it is propogated, is sometimes taken from unhealthy persons. That is a question by itself; and the danger should, by every means be avoided.

SYMPTOMS of the genuine disease.—About the 4th or

5th day, a small point appears at the place where it was introduced ; enlarging in 2 or 3 days to a small pustule, which is depressed in the centre. By the 7th or 8th day, there is an inflammatory circle around the edge of the pustule ; sometimes enlarging to 2 or 3 inches in diameter, but remaining circular. By the 11th day, the pustule begins to thicken, and form into a dark crust ; and the inflammation subsides, beginning at the centre.—At length the scab falls off and leaves a permanent scar.

SPURIOUS.—Inflammation on the 2nd day—no depression of the pustule—running its course sooner than common—irregular margin—much swelling, erysipelations, inflammation, and blue appearance of the pustule.

Vaccination.—This term implies the method by which the kine pox is communicated. It consists in introducing a portion of the pus or moistened scab of the pustule beneath the cuticle, by the least possible puncture.

The scab, sealed in a vial, and put in the dark, will keep for years.

The small pox was formerly communicated in this way, because it mitigated its symptoms ; this is called *innoculation*.

Treatment.—The kine pox seldom requires medicine—if any, similar to that for measles.

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CHICKEN POX.

SYMPTOMS.—This is a mild disease ; commencing with chilliness ; slight feverish symptoms ; and pains in the back and head ; followed by small pimples, filled with a whitish fluid, which changes to a straw color ; and in 3 or 4 days dry up, leaving small black scales.

Cause.—*Contagion*.

Treatment.—Composition ; or warming herb tea. If the case is bad—a course of medicine

SYMPTOMS.—Pain and inflammation of the parotid gland, which lies near the ear ; more or less fever, and sometimes slight delirium.

The pain and swelling increases, so that the patient can scarcely move his jaws ; and begins to abate by the 4th or 5th day. Sometimes it is translated to the testes of males, or the breast of females. It is not dangerous, excepting in the latter cases. It never appears but once, excepting when only one gland was affected.

Cause.—Contagion.—The translation is caused by exposure to cold, or great debility.

Treatment.—This seldom requires more than an occasional dose of composition, or stomach pills ; but when it falls on other parts, courses of medicine should be used ; with slippery elm poultices to the sympathetic part ; and vinegar and cayenne rubbed on the face and throat, and gargled in the mouth ; and a steaming stone kept under the chin.

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WHOOPIING COUGH.

SYMPTOMS commencing like an ordinary cold. About the end of the 3rd week the spells of coughing continue longer, are more severe, and attended by a peculiar sound called whooping. During the paroxysm of coughing, the face is suffused with blood, and the patient seems in danger of suffocating ; and frequently ends in vomiting. It often lasts 6 or 8 weeks ; but is seldom dangerous.

Cause.—Contagion, which mostly attacks children, and takes effect but once.

Treatment.—Nauseating doses of lobelia ; assisted by an occasional thorough emetic, or course of medicine, will very much mitigate the disease. The cough powders, or balsam may be used instead of the lobelia in common form. For a common drink, use a mucilage of slippery elm, flax seed, or gum arabic. Tonics, will occasionally be necessary. If the child is difficult to take medicine, give it by injection, or apply a lobelia poultice upon the breast.

CHAP. XIII.

EPIDEMICS.

ASIATIC CHOLERA.

This very fatal epidemic first appeared in India in 1817, and spread westward until it reached America in 1832.—It still occasionally prevails in some parts where it has formerly visited.

SYMPTOMS.—Commencing with lassitude ; rumbling in the bowels ; nausea ; moderate diarrhæa, or inclination to go to stool ; tongue furred in the centre, and red at the tip and edges. These premonitories may last for several days ; but sometimes are followed by the more violent symptoms in a few hours ; as follows : violent pains in the stomach, bowels, and head ; almost incessant vomiting and purging of a rice water fluid ; inordinate thirst ; and spasms of the extremities. If recovery does not take place, which is generally attended with feverish reaction, and bilious discharges, the skin becomes cold, wrinkled, bluish and covered with a clammy sweat ; then the pulse is lost in the wrist ; the nails are blue ; the eyes are sunk ; and death, without impairing the mental faculties, closes the scene.

Cause.—A peculiar principle in the atmosphere, most common in populous places.

Treatment.—At the commencement, give alternately every hour, a cup of composition, and a dose of cholera or dysentery syrup. If this should not arrest it, give courses of medicine, repeated according to the nature of the case ; using plentifully of cayenne. Great effort must be used to keep the blood in the surface and extremities, by putting

steaming stones about the patient; and bathing and rubbing the surface with vinegar and cayenne.

Examples.—In Albany, 1147 cases of cholera were reported by the Regulars, and 417 deaths—lost over 1 in 3.

A Thomsonian of Cincinnati, attended 96 confirmed cases, and over 100 in the premonitory stage, and lost but 18—1 in 11.

According to Worthy, Dr. Dodge Sweet, a botanic of New York, had 63 cases, and lost but two.

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DYSENTERY.

SYMPTOMS.—Sometimes commencing with loss of appetite, nausea, and vomiting; followed by griping pains in the bowels, small but frequent stools, attended with pain, frequently passing nothing but mucous, which is often streaked with blood; sometimes the stools are acrid and resemble the washings of meat; sometimes pure blood; natural feces seldom pass, and when they do, they are in hard balls; their passage occasioning pain, followed by relief. There is a frequent desire to move the bowels, with unavailing efforts. Considerable fever prevails, especially after 1 or 2 days.

FAVORABLE.—Fever subsiding after a few days; evacuation of bile and other healthy symptoms with the stools.

UNFAVORABLE.—Great excitement and tenderness of the bowels; much depression of strength; fetid stools; bloating of the abdomen; hiccough; petechie; and a weak and irregular pulse.

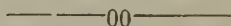
Cause.—This appears to depend upon a peculiar state of the atmosphere. It occurs most frequently in warm weather, and warm climates.

Treatment.—If the bowels have not already been evacuated, and relieved of their hardened feces, it should be immediately accomplished with injections. If this should fail to produce the desired effect, give but once a mild aperient, such as rhubarb and soda. Then give

composition and No. 6, once in 2 hours, and the dysentery syrup in the intervals. If this should not succeed, give a course of medicine, and repeat every 24 hours.—Injections containing No. 6 and astringents, should be given several times a day. Use a constant drink of raspberry or some other astringent ; and take especial pains to keep up a perspiration. Steaming, followed by rubbing the surface with cayenne and vinegar, has a powerful effect in removing the griping pains and determination to the bowels.

Regimen.—The food may consist of milk porridge, well boiled, and seasoned with black pepper. Ripe and wholesome fruits have been found very beneficial.

Examples.—In 1838 this disease prevailed quite extensively in Shaftsbury, where several deaths occurred under the regular treatment. The people were alarmed and calling us, we treated 45 cases, all of whom speedily recovered. In 1842, it visited this town, with a similar result under regular treatment. Out of 300 cases, we lost but 1.



EPIDEMIC ERYSIPELAS.

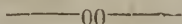
This is a peculiar disease, that has proved very fatal (with regular practice) in several sections of the United States, for a few years past.

SYMPTOMS.—Sudden languor, and fever ; a pain seizing some part of the body, followed by inflammation, swelling ; and in many cases mortification and death. It frequently attacks the throat and mouth, for which it is called, by some, the black tongue. The symptoms at first, are of an inflammatory character, which often collapse into those of a typhus, and alarming kind.

Cause.—A peculiar unknown principle in the atmosphere. The only way to avoid it is to leave the infected district.

Treatment.—From the success of the Thomsonians in this disease, it is believed that little danger need be apprehended from it, under an early, and natural treat-

ment. Give courses of medicine. To the inflamed parts apply slippery elm poultices ; washing with weak ley whenever they are changed. If it attacks the throat, give a treatment similar to that for putrid sore throat.



EPIDEMIC INFLUENZA.

This disease, called by the French, la grippe, has several times travelled over Europe and America ; and during the past summer prevailed throughout the civilized world.

SYMPTOMS.—Feverishness and head ache ; followed by sneezing, hoarseness, cough ; and constant discharge from the nose ; its effects lasting from 1, to 2 or 3 weeks. It is seldom dangerous, excepting to the aged, and consumptive.

Treatment.—Make a frequent application of the vapor bath ; inhale into the lungs and nostrils, the vapor of tar and cayenne ; use the composition and stomach pills 2 or 3 times a day ; and courses of medicine, if necessary.

Remark.—A great number of strange epidemics, or pestilences, very different in their nature, have arisen at different times, then disappeared forever. The subject is highly curious.

[CHRONIC DISEASES.]

CHAP. XIV.

DISEASED VISCERA.

PULMONARY CONSUMPTION.

SYMPTOMS.—Usually commencing with a dry, hacking cough, increased by exposure to cold ; pain and tightness in some part of the chest ; especially on taking a full breath ; breathing made difficult by exercise ; face flushed after eating ; and a peculiar whiteness of the eye, resembling the inside of an oyster shell. As the disease advances the cough becomes more troublesome ; particularly at evening and morning ; the expectoration increases and becomes thicker, until it has a greenish purulent appearance. Profuse sweating occurs at night ; acute pain is felt in the breast and sides ; burning in the feet and hands, emaciation comes on ; the eyes are sunken, but expressive ; the breathing quick and short ; the pulse weak, and generally exceeding 120 beats in a minute ; and a circumscribed patch of red is often seen on the cheek. Finally, there appears dropsical swellings of the feet and legs ; copious diarrhoea ; sore mouth ; failure of the voice ; cadaverous expression of countenance ; and after a period, varying from weeks to years, death itself.

These are the symptoms of the tubercular consumption ; but there are several other varieties, which terminate in similar effects ; one arises from an affection of the larynx ; another from ulceration of the lungs ; another from chronic inflammation of the pleura resulting in an effusion of water in the chest ; and another, the next most common variety, arises from a pro-

tracted bronchitis, or chronic inflammation of the wind pipe and bronchial tubes, called catarrhal consumption; and distinguished from the tubercular, by the face being more pallid, and the lips of a bluish hue, soreness in the upper part of the chest, coldness in the beginning; by the expectoration being free, and containing a large portion of transparent, or frothy mucus. But it is often blended with the former, and with dyspepsia, and liver affections. The pus which comes from tubercles, sinks in water, especially when disengaged from mucus.

Causes.—The proximate cause of tubercular consumption, is the formation of a peculiar matter in the lungs, in the form of white lumps of various sizes, called tubercles, which soften and discharge. They are supposed to be of the same nature, with the indurated lumps of scrofula. The proximate cause of catarrhal consumption, is an inflammation of the mucus membrane of the lungs, a deficient action of the skin, and a determination of perspirable, and other fluids to the lungs. The remote causes of each are a peculiar predisposition, exposure to cold, excessive venery, tight lacing, breathing particles of dust, a cold climate, poisons, and every debilitating thing.

Treatment.—The general indications in the cure of this disease, are to regulate the stomach and bowels, by an occasional course of medicine; and strengthen the system with appropriate tonics, such as the dyspeptic powders, spice bitters, poplar and golden seal; and equalize the circulation, by bathing the feet in hot water, and applying the stimulating liniment over the surface at bed time. The composition should be taken from 3 to 5 times a day; together with the vapor bath, occasionally followed by a brisk rubbing with liniment, or cayenne and vinegar. A stimulating plaster, applied to the breast and back, may be found very beneficial. No means should be omitted to determine the blood to the surface. The cough powder, drops, or balsam may be used several times a day to promote a free expectoration; or the stomach pills may be used along with the composition. The medicated wrapper we have used with good success; See recipe. Ramage's tube, or the lung infla-

ter, has produced the best results. They are sold in our principal cities. A substitute may be found by inflating the lungs full of air, and gradually expelling it through the nostrils. This exercise will very much strengthen and expand these organs; but it must be regulated according to their strength. Catarrhal consumption receives great benefit from inhaling the vapor of tar. Alone, it has cured 8 out of 32; and with courses of medicine, no doubt would do much better. This vapor stops the discharge, which should be substituted by producing a healthy perspiration. It aggravates the symptoms of tubercular consumption; and is a good test.— But even the latter case might find benefit by inhaling the vapor of myrrh and cavenne, and burning wool.

Another remedy, introduced by Dr. John Thomson, we have found of the highest value in this disease. It is a foot bath, consisting of warm soup, prepared as though it were to be eaten, from the hock joints of beef, or such peices as contain the most gelatin; the isinglass of the druggists is very good. In this, the feet of the patient are to be bathed from one to two hours; keeping it as warm as it can be borne. It fills up the veins, causes a lasting perspiration, and invigorates the system. The length of time that its effects last, is a good criterion of a patient's probable recovery. According to the reasoning, and experiments of Liebig, it seems probable that the cellular tissue, which is much injured in this disease, may receive support from gelatin, its basis, without that element undergoing any change in the body. If so, the mysterious, *modus operandi* of the soup bath, will appear very simple. Would not gelatin be highly servicable, applied to all ulcerated and abraded surfaces?

EXAMPLE.—MRS. MONROE of Shaftsbury had been for some months afflicted with very alarming symptoms of this disease; so low that a dark room was deemed necessary; and her physician said that she could live but a very short time.

Through the pressing solicitation of her friends, we consented to treat her case. In 2 or 3 weeks, she was able to leave her room; in two months rode out; and is now well. This is but one of the many cases of consumption, that,

notwithstanding its obstinacy, has been cured by us and other Thomsonian practitioners.

Regimen.—This is of great importance in the cure of consumption. Use a regular and strengthening diet, that no way disagrees with the stomach, Wash the skin frequently with castile soap and water, followed by salt and vinegar, and rubbing with a coarse towel, or flesh brush; wear flannel; and exercise much on horse back. Avoid taking cold, or breathing very cold air into the lungs; for the latter purpose a very useful instrument, called a respirator, made of several layers of wire gauze, may be found in the medical markets.



LIVER COMPLAINT.

SYMPTOMS.—These vary much, and are often obscure and uncertain; but certain it is that enlargement, abscesses, and particularly a chronic inflammation or torpid state of the liver, are the foundation of many common complaints.

It is known by a pain in the right side, shooting into the shoulder, though sometimes it is in the left side; a sense of fullness after eating; costiveness, heart burn; clay colored stools, loss of appetite, though it is sometimes voracious; bad taste in the mouth; dry harsh state of the skin; belching of wind; nervous and dyspeptic symptoms; languor; drowsiness; disagreeable dreams; irritability and hypochondriasis. When the bile is absorbed into the system, the skin and eyes are yellow; but when the liver is torpid, the complexion is often fair. The organ is sometimes enlarged, so as to be felt below the ribs.

Causes.—Obstructed perspiration, overeating, sedentary habits, gall stones, malaria, ardent spirits, mercury and other poisons.

Treatment.—Where the case is mild, 2 or 3 stomach pills with composition several times a day, and a teaspoonful of cayenne and bitter root, equal parts, at night, will have a decidedly good effect. The express

ed juice of the dandelion, root and top, will be found very effectual in opening the secretions of the liver ; it should be taken largely. The bile pills will be found servicable to open the bowels. In bad cases, add to the above treatment courses of medicine ; repeated once or twice a week. The vapor bath at least should not be omitted ; as it possesses the most valuable powers in this disease ; especially, if caused by mercury, which is not at all uncommon. Bathing the feet in hot water should also accompany the steaming, or may be substituted for it. These operations may be followed by bathing the whole surface with the stimulating liniment ; as it is of the greatest importance to induce a healthy state of the skin , for it is ascertained that in many diseases, the external and internal secretions are apt to coincide. A plaster may be applied to the right side. As the disease is often attended with nervous and hypochondriacal symptoms, nerve powder should be added to the composition, especially at night. The spice bitters, or dyspeptic powders should be taken at meal times ; and if the urine is scanty, diuretics will be found beneficial. Time, exercise, and a harmless diet is required for the complete removal of chronic affections of the liver.

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DYSPEPSIA.

SYMPTOMS.—Weakness of the stomach, pain and uneasy sensations in that organ, especially after eating, sometimes the food is thrown up a short time after meals, and often passes the bowels undigested. In some cases there is a constant diarrhoea attended with cold hands and feet, a great susceptibility to cold, and, a dull pain between the shoulders. More commonly the bowels are constive, attended with an acid stomach, flatulency, and belching of wind, heart burn, and head ache ; and sometimes they vary from one state to another. There is generally, a long train of symptomatic affections, varying much in different patients ; such as chills and flushes of heat, languor, despondency, palpitation of the heart, dizzi-

ness, melancholy, night mare, and frightful dreams.—There are also more or less evidences of liver affections. It occurs in all ranks of society, comes on slowly and is slow to cure.

Causes.—These are many things that weaken the general strength of the body, as the sedentary habits and unnatural postures common to many mechanics, and females, hard labor, excessive venery, habitual use of cathartics, ardent spirits, tobacco, coffee, tea, mercury, opium, and blood letting, hard indigestible food, new-bread, raw fruits, grease, butter, and exposure to cold.

Treatment.—The dyspeptic powder or composition before eating, and 2 or 3 stomach pills after, will be found of essential benefit ; the anti-dyspeptic conserve may also be eaten in the intervals. These medicines, with a proper regimen, will cure many ordinary cases. But it will be advisable to give an occasional course of medicine : and in bad cases they should for no reason be omitted. Due attention to the skin, bathing, and rubbing it with liniment, will do much good particularly if diarrhœa exist. The acidity of the stomach, or heart burn, will easily be relieved for a time, by the use of soda, salærated or weak ley ; but these should not be depended upon for a cure. The bile pills will be found superior to any other aparient for opening the bowels, when the regimen does not suffice. Cathartics should be avoided, as they injure the tone of the stomach. Cayenne pepper is a valuable medicine in dyspepsia, and may be used freely upon the food, and in variety of ways to suit the taste of the patient. Any other formula of bitters, besides the dyspeptic, used among us, may be employed.

Regimen.—On this depends the main part of the cure of dyspepsia. Fasting 1 or 2 meals, every 3 or 4 days, may cure it alone, new bread and grease must be avoided. The food must be well chewed ; and every species of intemperance abandoned. Exercise is indispensable, particularly, riding on horse-back. Change of climate, and sea voyages are more beneficial in this than in consumption.

Symtoms.—These are various and rather uncertain—pain in the left side, palpitation, intermission of the pulse, difficulty of breathing, purple hue of the lips, livid complexion, puffy appearance of the eyes, and haggard countenance. The purplish hue of the countenance, and palpitation occurs in asthma, but in the former there is not that peculiar wheezing, which attends asthma. Some of the symptoms may be permanent, and some occur in paroxysms. In bad cases there is a laboring; irregular action of the heart which may be both seen and felt in its proper region. There is sometimes a violent palpitation, accompanied with a spasmodic pain in the breast, called *angina pectoris*.

Causes.—The proximate, are enlargement, or softening of the heart, ossification of the valves, or aorta, chronic inflammation, and dropsy of the pericardium. The exciting, are various diseases, and particularly excessive sensual indulgences, and passions. The organ, no doubt has a predisposing weakness in some persons. Real diseases of the heart are rare; yet there is sometimes a pain in the left side, from liver and other affections; and it often has an irregular action from symptomatic causes, which is the occasion of ungrounded alarm.

Treatment. Much may be effected in this complaint, by equalizing the circulation; for in its paroxysms there is a congestion of blood about the heart and lungs. A free use of stomach pills and nerve powder, composition, or stimulating tea, accompanied with bathing the feet, or the vapor bath, will generally relieve the severer symptoms, especially if it be ordinary palpitation.—Courses of medicine have been used with complete success in several cases of apparent disease of the heart.—By the aid of such assistants, and a careful regimen, real diseases of this organ though, generally incurable, may be bettered, or held at bay until old age.

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SCURVY.

SYMPTOMS.—Debility and prostration of strength; bleeding from the gums; spots of different colors on

the skin, generally livid, particularly at the roots of the hair; old wounds, which have been long healed up, break out afresh; severe wandering pains prevail, particularly at night; the teeth are loosened; the breath is offensive; the urine has an alkaline quality; the joints become swelled and stiff; fetid stools and other putrid symptoms close the scene.

Causes.—Some deficiency in the food. It occurs mostly among sailors, and particularly those that live mostly on animal food, and are deprived of fresh vegetables.

Treatment.—It was strongly proved, in the long voyages of Capt. Cook, that a frequent use of fresh vegetables, particularly of cabbage, mustard, scurvy-grass, and others of the cruciform family, would prevent this disease. Lemon juice, and other vegetable acids, are also very effectual. These articles not only prevent, but cure the scurvy.

The disease seldom occurs on land; and we have mentioned it on account of its peculiar remedies, as a hint to the treatment of other similar diseases—those of a putrid kind. Besides the medicines mentioned, scurvy will undoubtedly derive much benefit from usual Thomsonian remedies.

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CHRONIC RHEUMATISM.

SYMPTOMS.—This well known affection has several varieties. One consists of a pain, particularly on moving, in the hip, shoulder or back; sometimes changing from one to another, and occasionally attended with some degree of swelling. Another species, has pain accompanied with stiffness, only discovered on motion, and has no swelling. A third kind has little, or no pain, and is distinguished by enlargements, or nodes of the joints.

Causes.—Exposure to cold; hard lifting; spiritous liquors; much animal food; and mercury; the last is particularly the cause of the nodes.

Treatment.—The first two kinds of this disease may be cured, or much bettered by courses of medicine, accompanied with a free use of No. 6, or the tincture of myrrh; followed by bathing the parts with a liniment, containing oil of organum. Fomentations of bitter herbs, followed by rubbing with salt, vinegar, and cayenne, may be very useful. The stimulating poultice may also be applied. Steam frequently. The following is a fine preparation, and very effectual: Black cohosh, prickly ash, nerve powder, and pipsisewa, equal parts; boil in one quart of water, add one pint of gin, and sweeten. Dose—a wine glass full from three to five times a day.

DROPSIES.

DROPSY OF THE CHEST.

Symptoms.—Sense of tightness and oppression in the chest, difficulty of breathing, inability to lie horizontally; the patient, either sitting upright, or requiring his shoulders to be elevated, sleep disturbed by sudden starting, and sense of alarm, pulse irregular, and commonly hard, thirst urgent, urine scanty, high colored and sedimentous, swelling of the feet, anxiety of countenance, a dry, short cough; and particularly the perceptible motions of a fluid in the chest.

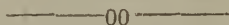
Favorable.—When the disease has not been preceded by any severe inflammation of the chest: spontaneous perspiration, or an increased flow of urine.

Unfavorable.—It is frequently incurable, especially if preceded by any serious affection of the part. Spitting of blood, a livid countenance and a sudden subsidence of the swelling of the feet or limbs, without an increase of urine.

Causes.—The immediate cause, is a weakness, or an obstruction of the veins, which produce a transudation of the serum. It seems that dropsies in general, are preceded, or attended by an inflammatory action: The exciting causes are, cold, intemperance, and the general causes of other diseases.

Treatment.—This disease requires thorough courses of medicine; for they are the most effectual means known, to throw out the fluid by perspiration, to promote absorption, to restore the suspended secretions, and to establish the tone of the blood vessels. These may be aided by several specifics; as the white root, and milk weed, to induce perspiration; cleavers, queen of the

meadow, parsley, &c., to increase the flow of urine; and the bile pills, or bitter root and cayenne, assisted by injections, to keep open the bowels. Great advantage will be found in the vapor bath, independent of the courses. A liberal use of cayenne should be made throughout the treatment. As the water is evacuated, the advantage should be maintained by the use of some tonic. An effort must be made to restore the vigor of the skin, by bathing with the stimulating liniment, salt and vinegar, and friction. The diuretic cordial may be used several times a day, instead of other diuretics. The Cough Balsam has a very fine effect upon this disease. Bathing the surface with weak ley, will be an important aid to precede the vapor bath, which should be followed by the cold dash. The medicines should be given in as small a quantity of water as practicable.



DROPSY OF THE ABDOMEN.

SYMPTOMS.—It is sometimes preceded by loss of appetite—dryness of the skin—costiveness—and diminution of the urine. The abdomen becomes swelled, and continues to enlarge—and the motion of water may be perceived by placing the hand on one side, and striking the abdomen with the other. The urine is more high colored, and the bowels more sluggish in this species of dropsy, than any other.

FAVORABLE.—The severest symptoms of this kind of dropsy, are, short and difficult breathing—inability to take but little drink or food—swelling of the limbs—and soreness of the abdominal walls. Subsidence of the dropsy in the limbs, without an increase of urine, is very unfavorable.

Cause.—The immediate cause, is, generally a diseased state of the liver, or spleen. Remote causes—many.

Treatment.—This requires the same treatment as for the preceding: excepting that a large use of the ex-

pressed juice of the dandelion, or some other appropriate hepatic, is required to open the secretion of the liver. Bathing with the stimulating liniment over the surface of the bowels, followed by long continued friction, will do much good ; after which a swathe of flannel may be put around the body. Tapping, or making an incision into the cavity, to let out the water, is sometimes necessary to relieve this species ; but it is only temporary, the wound is sometimes dangerous, and should be avoided, if possible.

Dr. Thomson was once enquired of, by a regular, how he cured the dropsy, in a case which he had just reduced 15 inches in size. "You know, Doctor," said Thomson, "that the heat had gone out of the body, and the water had filled it up ; and all I had to do was to build fire enough to boil away the water." The regular burst into a laugh, and said that was a system very short.



DROPSY OF THE BRAIN.

SYMPTOMS.—This generally occurs in young children ; and is most commonly preceded by more or less appearance of inflammation of the brain ; such as irritability of temper—starting in sleep—flushing of the face—occasional frowning expression of the countenance—evidences of pain in the head—wakefulness—torpor of the bowels—a disposition to lay the head low—and nausea and vomiting when it is elevated—and pupil of the eye contracted. As effusion takes place, the symptoms change ; such as stupor, or continual delirium—convulsions—palsy of the eyelids, or of one side of the body—the pupils are generally dilated—and in protracted cases, there is an evident swelling of the head, and protrusion of the bones.

FAVORABLE.—Urine having a heavy sediment, and fetid smell—softning of the pulse, and a discharge from the nose.

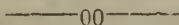
UNFAVORABLE.—Blindness, or deafness—deep stupor

—a copious discharge of pale urine—watery discharges from the bowels—and twitching of the muscles.

Causes.—Exposure to cold—difficult teething—irritation of the bowels—striking in of eruptions and in some there seems to be a natural predisposition ; such, being generally of a scrofulous habit.

Treatment.—During the first stage, give courses of medicine, and nauseating doses of lobelia, bathe the feet long, and repeatedly in hot water, followed by rubbing with the vinegar tincture of cayenne, and drafts containing cayenne to the feet. During the whole time, a wet cloth should be kept on the head. The bowels must not be neglected.

In the second stage, the same means must be used, and increased if possible ; besides there may be added, a free use of white root, or some other sudorific ; the bowels kept more freely open with injections ; and in some cases an aperient may be necessary. The hydragogue cordial, or some other diuretic, will also be advisable.



DROPSY OF THE CELLULAR MEMBRANE.

SYMPTOMS.—This is an effusion of the serous fluid in the loose membrane beneath the skin ; sometimes extending, nearly over the whole body ; and sometimes confined to local parts. It commonly commences with the feet and proceeds upward ; and is often connected with a sluggish languid state of the system. Its most distinguishing symptom, is a pitting from the pressure of the fingers, which remains sometime after they are removed. It is often connected with dropsy of the abdomen and chest.

FAVORABLE.—When the disease is unattended with any other serious complaint ; and is a general affection, caused by cold, scarlet fever, hæmorrhage, or arsenic, it is quite frequently cured.

UNFAVORABLE.—When it arises in diseases of the heart or lungs ; and is attended with great debility

Causes.—Loss of blood—suppressed perspiration, particularly after the scarlet fever, or the use of mercury—intestinal irritation—repelled cutaneous eruptions—chronic gout—organic diseases of the heart, lungs, or kidneys—excessive diarrhœa, and other evacuations—the long continued use of arsenic—pregnancy—and any thing that obstructs the return of the blood through the veins.

Treatment.—Full courses of medicine, with a protracted use of the vapor bath, is the first thing in this complaint. Bathing and briskly, rubbing the skin with stimulating liniment, or the vinegar tincture of cayenne is very important. Diuretics may be freely used. After a few courses of medicine, the bitters should be employed.

The Dropsies, like most other diseases, will require, more or less use of astringents, to detach the canker and false membrane from the stomach and bowels, and cleanse and restore tone to the general system. For this purpose, the sumac is the most appropriate ; as it is, a diuretic ; the roots are balsamic, the leaves astringent, and the berries acid. Unite the three ; add gin to preserve, honey to sweeten ; and take a wineglass full 4 or 5 times a day. The alkaline wash, to relax and open the pores, preceding the vapor bath, will be advisable.

OBSTRUCTIONS--Chronic.

COSTIVENESS.

SYMPTOMS.—Hardened state of the feces, the bowels not moving off every day, acid stomach, heart burn, loss of appetite, head ach, foul breath, flatulency, piles and nervous affections. It is often symptomatic of other affections ; but it frequently seems to be idiopathic and constitutional.

Causes.—The immediate, are, the loss of the peristaltic motion of the bowels, and a difficult secretion of bile. The remote, are, the use of fine flour bread, sedentary habits, the employment of opium, astringent condiments, drastic purges, mercury, fat meat, spirituous liquors, over-eating, and any thing that injures the action of the liver.

Treatment.—Altogether too much reliance has been placed upon cathartics, for the removal of this difficulty.—It is true that they relieve ; but in the end they increase the complaint. A proper regimen is the only true cure. However, cathartics may be employed for present relief, where enemas will not suffice. After this, keep the bowels open a few days, by the use of the bile pills, or bitter root and cayene, equal parts, taken once a day. Or, what is more purely an aperient, and also a tonic, cayenne and golden seal, equal parts, 3 or 4 times a day. It should be remembered that cayenne taken cold, is more laxative, than when scalded. The following, will be found a very convenient medicine for habitual costiveness. Bruise onions in a mortar to a pulp, add a large portion of golden seal, seasoned well with cayenne and oil of peppermint, sweetened liberally with sugar, thickened with slippery elm flour, and formed into cakes. Eat freely at meal time.

Regimen,—A diet of unbolted wheat bread, is now very

popular, and found to be a very effectual remedy for this complaint.

Bathing, and other means to invigorate the action of the skin, has a decided effect upon it. Shampooing—(or rubbing, pressing, and kneading the bowels with the hands)—has been used with success; but active labor, is a more natural substitute. Riding on horseback, we have known to produce a free bilious discharge, after torpidity of the liver. Use but little animal food; eat more freely of fruits, fresh vegetables, and indian corn; and avoid fine flour bread; especially that of the bakers, which often contains alum, and other unwholesome articles. Fast frequently; and eat no piece meals.



JAUNDICE.

SYMPTOMS.—It generally comes on with languor, drowsiness, costiveness, acidity of the stomach, and pain in the right side; followed by a yellowish color of the skin and eyes, sometimes every object seems to have a yellow hue; and occasionally the skin has a dark or greenish appearance, called black jaundice. There is a yellow coat on the tongue, a bitter taste in the mouth, itching over the surface, and the feces are often clay colored. Sometimes it lasts but a few weeks; in other cases, it is very chronic.

Causes.—Any thing that obstructs the ducts of the liver, and causes the absorption of bile into the system. Gall stones, sometimes make the obstruction; known by acute intermitting pains in the right side near the pit of the stomach.

Treatment.—For mild cases, use the stomach pills several times a day, with some form of bitters at meal time; and the bitter root and cayenne at night. The insippisated juce of dandelion may also be used freely. Where there are symptoms of gallstones, thorough, *relaxing* courses of medicine, are required, in order to favor the escape of these impediments from the gall bladder and ducts. Two baths, and two enemata, may be given, containing lobelia, to each course.

Courses of medicine, steaming, and bathing the surface with liniment, are useful at any stage.

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FALSE MEMBRANE.

"This is a substance that covers the mucous membrane of the stomach and bowels, both in acute and chronic diseases, and is detached by the administration of courses of medicine, or any equivalent mode of treatment, which tends to exalt the vital powers, and thoroughly renovate the system. It is of a greyish, or whitish color, and possesses considerable firmness. There is every reason to suppose that, in many cases, it lines the whole extent of the intestinal canal, together with the stomach; for I have known it to pass off by stool, for weeks in succession, amounting in aggregate to several quarts. It is usually discharged in shreds, or patches, but sometimes passes in a tubular form, exactly resembling an intestine. It is thick, firm, and tough, but evidently unorganized, appearing to be wholly destitute of blood vessels and nerves. It is similar to the membrane coughed up by children in croup, and is no doubt an effusion of lymph, which is soft at first, but gradually hardens, and assumes the form of a membrane * * * A thorough knowledge of this morbid substance, is of great practical importance in the treatment of disease, for it plays a conspicuous part in many of the disorders to which the human system is liable. When it coats the internal surface of the stomach and bowels, it interferes with the digestive process, and prevents, to a certain extent the absorption of chyle from the intestinal canal, without which the body cannot be adequately nourished. This will account for the lean and cadaverous appearance of many people afflicted with chronic disorders * * * In all chronic diseases there is a discharge of false membrane by stool before a cure is effected; and this occurs also in some of the acute diseases, in which there has been sufficient time for its formation. The period at which it is detached, after the treatment has been commenced, varies according to circumstances; it may be a few days, or a

number of weeks ; and the membrane may be discharged in two or three copious stools, or it may continue to make its appearance for a fortnight or a month. In some instances it is ejected from the stomach in shreds or patches, during the operation of an emetic.”—*M. Mattson, T. P.*

“The first that I ever saw of this membrane, was in the summer of '34. I had administered a course of medicine to a patient, and accidentally discovered that a large quantity of skinny like substance had passed from his bowels. This fact struck my attention at the time, and from that period to the present time—1843, I have found it to be universally present in all cases of disease, at least with few exceptions ; and as a general rule, disease begins to yield as this false membrane passes away.

“There is no plan of treatment that can be adopted, that would prove as effectual in removing this coating of morbid matter from the stomach and bowels, as courses of medicine, and a free use of cayenne and bayberry.—This subject, though of great importance in a medical point of view, has not to my knowledge ever engaged the attention of the medical profession in this country. Dr. S. Thomson, in using the term ‘*canker*’ [He claimed it as his discovery, and justly too ; for the regular practice created it, while his removed it] has allusion to morbid secretions, coating the stomach and bowels ; and through his discoveries, we are furnished with the knowledge of the best means to effect their removal.”—*J. W. Comfort, M. D.*

Within a few years, “false membrane” has been critically noticed, and well attested by the Medical Faculties of Europe. In the cases reported, it seems not to have been removed by their medicines, but the efforts of nature—attacks of fever, cholic, or some other acute disease ; after which the patient, frequently, very soon recovered.

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GRAVEL AND STONE.

SYMPTOMS.—Of gravel in the kidneys—fixed pain in the loins—numbness of the thigh on the side affected—

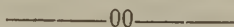
retraction of the testicle, frequent desire to pass water, nausea and vomiting. When the gravel moves from the kidneys into the bladder, it is attended with acute, and often excruciating pain. Of stone in the bladder—a frequent desire to pass water and evacuate the rectum—an uneasy sensation in the head of the penis—severe pain in the lower part of the bowels, retching and vomiting, and urine sometimes bloody—its passage is frequently interrupted, and the pain is greatest immediately after the discharge.

Causes.—The gravel are little earthy concretions, like sand. Their formation is attributed to an acid state of the urine. The stone is of the same nature, but the bodies are larger. They are found in both the kidneys and bladder. Gravel seldom terminates in stone. This kind of disease is most common in childhood or old age. There is much similarity between the morbid matter formed in gout, and in stone; and the same habits of life have been known to produce each disease.

Treatment.—Take cleavers, strawberry, and partridge vine, two oz. of each; boil in two quarts of water; add honey, flaxseed jelly, and gin to preserve it. Take a wine-glass full from three to six times a day, adding to each dose a tea-spoonful of cough balsam. After taking this a few days, accompanied with a dose of cayenne in a cup of alkaline water three or four times a day, then take an injection of strong, soft-soap suds containing a tea-spoonful of brown lobelia, followed by a protracted use of the vapor bath, steaming below the hips for a time at first; then give a thorough emetic, followed by a bath and injection like the first. Soda water should be given with the emetic, and no astringents employed. This course is designed to relax the system so as to allow the escape of the gravel from the uterine or urethra. The juice of the common radish is recommended as having the power to dissolve gravel and stone. Metheglin has been known to produce a free discharge of gravel. A decoction of the honey bee will be a powerful diuretic in this case. Smartweed tea has been successful, &c.

Example.—“I visited a patient who had symptoms of gravel in the kidneys, under the care of Dr. Fonerden.

The patient had taken two or three courses of medicine, and at the time I saw him the system was very much relaxed under the influence of lobelia, and he had what are termed the alarming symptoms. The family of the patient, being unacquainted with the effects of the medicine, were much alarmed. During the relaxation, the patient in voiding urine, passed a calculous, gravel stone about three-fourths of an inch in length, as thick as a common goose quill, and was immediately relieved.—*J. W. Comfort, M. D.*



CHLOROSIS.

SYMPTOMS.—Paleness of countenance—weakness—languor—palpitation of the heart—pains in the back, loins, and hips—costiveness—flatulence and acidity of the stomach—and a preternatural appetite for chalk, charcoal, clay, pickles, &c. As the disease advances, the countenance assumes a yellowish hue, verging upon green, which has given it the name of the green sickness. The eyes are encircled with a livid colored segment—the feet are affected with dropsical swellings. There are hysterical symptoms—the pulse is quick and weak, and bleeding from the nose, stomach, bowels, or uterus often occurs; the blood having a pale watery appearance. It often terminates in dropsy or consumption.

Causes.—Sedentary habits, want of pure air, luxurious living, cold, and any thing which causes a permanent retention of the menses, which is its proximate cause. It is peculiar to young unmarried females.

Treatment.—Commence with a course of medicine No. 1., making a free use of the composition and nerve powder combined. Either the hip or foot bath should be used every night, followed by rubbing with the stimulating liniment. The bowels should be moved every evening with a stimulating injection; a stimulating plaster be put on the back; a half a teaspoonful of cayenne, in milk or molasses, be taken at bed time; and the female restorative, or woman's friend, should be used three times

a day. The following is a valuable preparation to restore uterine action :

Take black cohosh, unicorn, black cherry, quassia-wood, prickly-ash, and myrrh, each a table-spoonful ; a lump of lime half the size of a hen's egg, to which add three pints of boiling water, and sweeten : Dose half a tea-cupful from three to five times a day. The courses of medicine should be repeated as often as it seems needed. Perseverance is very necessary in this case.

Regimen.—Exercise, is of the highest importance, particularly riding on horseback. Besides, use healthy and nourishing diet, and associate in cheerful company.

CHAP. XVII.

FLUXES.

DIARRHEA.

SYMPTOMS.—Unnatural looseness of the bowels, attended with a sense of languor; rumbling; griping pains. Sometimes undigested food frequently passes; at others, quantities of slime, or mucous; at other times, vitiated bile, resembling the washings of flesh; and in some cases a white chyle-like fluid passes off. It is attended with emaciation, and a dry and rigid surface.

Causes.—A transient kind is frequently produced by cathartics, and any thing that irritates the bowels. A profuse diarrhea occurs in the last stages of consumption and other diseases; in these cases the discharge is watery, and unnatural. In some diseases, it occurs as a favorable crisis, when it is always characterized by the appearance of bile; or by yellowness of the feces. Diarrhea frequently arises during the time of teething in children. The causes of the common chronic form, are various; as an improper diet, excessive venery, exposure to cold, mercury and poisons generally.

Treatment.—The two prominent indications in this disease, are, to restore the functions of the skin by the use of the vapor bath and stimulating liniments, and to remove the false membrane from the stomach and bowels by the use of emetics, stimulants and astringents.—These must be used with perseverance. The dysentery

syrup may be very advantageously employed in diarrhea, whether chronic or acute. A light but nourishing diet should be used ; and flannel be worn next the skin.

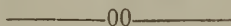


CATARRH IN THE HEAD.

SYMPTOMS.—Commonly commencing with sneezing and a thin watery discharge from the nose, which finally becomes thick, yellowish, greenish, and at length has a purulent quality; attended with a sensation of a peculiar smell, pain in the brow, and occasional coughing. It may last for years. One variety extends to the lungs, and causes consumption.

Cause.—Neglect of colds.

Treatment.—The vapor bath should be often used.—The vapor of tar breathed into the nostrils will be very good. Besides, take the following snuff: bayberry, bitter-root, blood-root, gum arabic, and gum myrrh, equal parts ; pulverized, and sifted.



DIABETES.

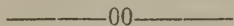
SYMPTOMS.—Unusual flow of urine ; sometimes the quantity is prodigious—great thirst—craving appetite—dry, harsh state of the skin—dyspeptic symptoms—and wasting of the flesh. In one species the urine has a sweet taste, and contains a quantity of sugar. It is remarkable, that, notwithstanding the exhausted state of the system, it sometimes ends in apoplexy. It may also terminate in consumption and dropsy.

Causes.—The immediate, are a relaxed, deranged state of the kidneys, and a deficient action in the skin. The remote causes, are exposure to cold; excessive indulgences; injuries of the spine, &c.

Treatment.—Courses of medicine ; frequent use of the vapor bath ; bathing and rubbing the surface with stimulating applications.

Deershorn burned to a coal, and pulverized, we have

found very effectual in curing this disease. It is very difficult to cure when it has continued some time.



LEUCORRHEA.

SYMPTOMS.—This disease, sometimes called flour albus, or whites, consists in a morbid discharge from the vagina ; sometimes like common mucous ; in worse cases it is white, resembling pulverized starch mixed with a mucilaginous fluid ; in more violent cases the discharge has the appearance of pus, and possesses an acrid corroding quality. It is attended with pallid countenance ; cold feet and hands ; dyspeptic symptoms ; pain in the loins and lower extremities ; debility and dejection of spirits.

Causes.—Sedentary habits ; luxurious living ; excessive sensuality ; difficult parturition ; and any thing that weakens the genital organs.

Treatment.—If this disease is of long standing, we should commence with a protracted course of medicine. Give two or three stomach pills with a dose of composition every two hours for ten or twelve hours ; keeping the feet warm. Then give a common injection, and a bath, wipe the surface dry, and rub the stimulating liniment thoroughly upon the back, bowels and limbs. After this, give from one to three doses of lobelia at suitable intervals ; with a free use of composition, or canker tea. After the emetic has done operating give a dose of spice or wine bitters, and a little toast. Then apply the vapor bath, and rub with liniment as before. This operation should be repeated as often as circumstances seem to require. The secret of curing this complaint consists mostly in restoring a due action to the skin. The female restorative, or some other tonic preparation, should be given as often as three or five times a day. The bowels should be daily moved by astringent, tonic, and stimulating injections ; and the female injection, in particular, should be used several times a day. A large plaster may be put on the back ; and the stimulating liniment, the

composition and the stomach pills daily used. The gelatin capsules, or balsam copavia in some form is very effectual in this complaint; in its stead the cough balsam, or balsam of fir dropped in sugar, will be very good.

GONORRHOEA.

SYMPTOMS.—There are several varieties of disease under this head, one of which is contagious, for which see syphilis; but the kind we intend here, is the involuntary emission of the semen during sleep. It is generally accompanied by a dream of corresponding nature; and results often in extreme emaciation and debility of mind and body—a predisposing cause to every disease.

Cause.—Precocious sexual desires; and self pollution. “This subject, from the nature of it, is not generally treated of by writers on health. But none is more important, as it involves consequences of the most serious kind. The semen is the most subtle, vital, and ethereal part of the body. It contributes to the support of the nerves as well as the reproduction of the human species; and its evacuation is by no means necessary, and when retained, adds greater strength to the system. It is found on the observations of the ablest physiologists, that the greater part of this refined fluid is reabsorbed and mixed with the blood, of which it constitutes the most rarified and volatile part; inparts to the body, peculiar sprightliness, vivacity, and vigor. These beneficial effects cannot be produced if the semen be wantonly and imprudently wasted. Besides the emission of it is accompanied with lassitude and relaxation, often with great nervous depression. It therefore should never be evacuated only in a state of superfluity, and even then never unnaturally.”—*W. Beach, M. D.*

Much more might be said. See Deslandes’ and Graham’s work on this subject.

Treatment.—The first means for the removal of this morbid habit, lies in *will*. Resolutions of the most constant and energetic kind must be adopted to prevent it; so much so as to extend through the deepest sleep. Besides this, the patient should sleep on a hard bed with as little clothing as possible; eat light suppers; retire late,

and rise early. Some of the tonic bitters and the shower bath at night will assist. Camphor dissolved in nitrous ether and sweet oil, and applied to the genitals, will assist to abate their morbid activity. The principal indication is to *stop the emission* by care and watchfulness, which is at once restoring strength to the body, and banishing the habit.

CHAP. XVIII.

ULCERATION.

ULCERS IN GENERAL.

Wounds many times, when properly treated, unite without any discharge ; this is called healing by the first intention. In other cases previous to healing, they secrete a white cream like fluid, called pus. This sometimes degenerates into an acrid, corroding liquid, attended with an absorption of the surrounding tissues ; the latter is more properly ulceration.

HEALTHY ULCERS.—These secrete pus, which without any other dressing, forms a scab, beneath which the abraded, or absorbed parts, are reproduced in little points called granulations.

IRRITABLE ULCERS.—These occur in an unheathly state of the body have no distinct granulations, but only a white spongy substance, covered with watery liquid.—They easily inflame, and retrograde from improper treatment.

INDOLENT ULCERS.—In these, the edges of the surrounding skin are smooth, rounded and prominent ; the granulations are smooth, weak and apt to be reabsorbed ; the pus is imperfectly formed, and adheres ; and the whole appears like a detached portion of skin, without an effort to restore it. Sometimes the surrounding skin has a dark, malignant appearance. This species of ulcer is

often found on the legs of old people, sailors, inebriates, and those whose blood is in a bad state.

Treatment.—A healthy ulcer seldom needs more than poulticing with slippery elm, followed by a dressing of the healing salve; often only the latter. The other species should be thoroughly washed and bathed in weak ley, followed with a wash of bayberry, or raspberry, and a little No. 6.; after which the slippery elm and ginger poultice may be applied. This is to be daily repeated. Where the patient is about, the poultice may be applied only at night, and the healing salve during the day. In many cases the general health requires courses of medicine, tonics, and the sarsaparilla syrup. Indolent ulcers have been greatly benefitted by sprinkling them with pulverized blood root; occasionally washing with soap suds. A stimulating poultice containing cayenne and lobelia, often has a good effect. 3d preparation is a good wash for indolent ulcers.

PROUD FLESH.

This is an excrescence of a fleshy looking substance, that arises from wounds and sores.

Treatment.—The powder, or the inspissated juice of the blood root is the best thing known to remove it. It may be applied frequently.

GANGRENE.

When an injured part turns soft, dark, and loses its sensibility, though retaining some degree of circulation it is called gangrene, or the first stage of mortification.

When a part becomes blackish, fibrous, insensible, without circulation, sometimes covered with blisters, and crackling from pressure, it is called a sphacelus, or the last stage of mortification. When the patient recovers, the living and dead parts separate by a distinct line. A species of mortification sometimes attacks the limbs of old people without previous injury. Hiccough is almost an invariable attendant of mortification.

Treatment.—The two preceding cases require a most thorough application of stimulants and antiseptics.—Tincture of myrrh and cayenne, made strong, should be

faithfully applied, internally and externally. Afterward, put on a poultice of charcoal and yeast. The charcoal should be previously calcined. The gastric juice from the stomachs of animals, has been applied with success. Water of tar, vinegar, chloride of lime, bitter herbs.—Wild indigo, smart weed, peruvian bark and other reputed antiseptics, may be employed.

ABSCESSSES.

These are an inflammation and swelling of the skin, or some glandular part, followed by suppuration, as instanced in breasts of females, and boils. Suppuration is known by lancinating pains, and chills; by the swelling gathering into a point, which softens, appears purple, or whitish, and around which the walls of the abscess may be felt, which now assume an increased redness; and by the abatement of pain, and the sensible fluctuation of a fluid from touch.

Treatment.—Give composition and stomach pills freely; apply a slippery elm and ginger poultice to the part; steam, and endeavor to disperse the swelling. If suppuration cannot be prevented, it seems to be very kindly aided by a poultice of bruised carrots. When pus has been formed several days, it is advisable to open them with a lancet; but it should be done with care, where there are large vessels; and in the female breast, the pus had better approach near the surface first, for fear of wounding the milk vessels, which would be troublesome.

FELONS.

These are deep seated abscesses that arise from the membrane that covers the bones of the hands; and are extremely painful.

Treatment.—Slack quick lime with soft soap; fill a thimble with the same, set it on the felon, and hold it there as long as the pain will permit; then immerse the hand in cold water; and again apply the soap and lime, and so continue. When the pain is subdued, apply the slippery elm poultice. This course will either arrest the suppuration, or soon terminate it with a very small amount.

POLYPUS.

This is a fleshy excretion that arises from the mucous membrane of the nose and uterus.

Treatment.—The latter may sometimes be removed by a ligature. That of the nose, may be removed in the beginning by snuffing up the nostril No. 6, and blood root. When it has grown large, apply the vegetable caustic which will kill the surface; cut this off, and apply the caustic again; and so continue until it is all cut away; afterward, apply the blood root.

PILES.

These are tumors in the lower part of the rectum, which are often very painful and troublesome; particularly on going to stool. The tumors when bad, from being immediately connected with the veins of the rectum, often bleed considerably; these are called bleeding, and the other blind piles.

Cause.—Sedentary habits; drastic, and particularly aloetic purges; habitual costiveness above all others.

Treatment.—The first thing is to keep the bowels loose by the use of the unbolted wheat bread; we have been informed of two cases where this has cured alone. Besides the patient should take an injection of poplar and bayberry, at night, and retain it till morning; using a tea spoonful of golden seal 3 times a day; which has been known to cure of itself. The pile salve should also be used night and morning. When the tumors are so large as to descend, they may be removed by passing a ligature around them, and tightening daily; or they may be destroyed by repeatedly touching them with caustive potash.

FISTULA.

This is a deep seated abscess or ulcer that occurs most frequently about the anus, and opens by a callous duct or sinus. Sometimes they form a communication with the rectum; and sometimes with the urethra. They rarely heal of themselves; and are difficult to cure.

Treatment.—Dr. Beach, recommends to steam the parts thoroughly over bitter herbs; and enlarging the sinus by introducing tents, which are to be rubbed with

a powder made by boiling down hickory ley; besides syringing them with ley as strong as it can be borne. His object is to keep open the fistula, promote an active suppuration, and at the same time soften the callous walls of the sinus; for which latter, apply the stimulating liniment and nerve ointment.

This process is followed after a suitable time by spontaneous healing.

TETTERS.

There are various species of eruptions, seeming to have their origin in a vitiated state of the blood, which we will include under this head. Small pimples and blisters arising, which break and corrode the skin, followed by a scabbing, itching, and inflammation, which, when healed in one place appear in another, being most frequently on the hand, difficult to cure, and apparently constitutional, are called *salt rheum*.

Another appears in little ulcers, which enlarge, unite together, and are attended with erysipelatous inflammation, called *corroding tetter*.

Another appears about the head and neck of children in hot weather, in little rash like pimples, that seldom break, called prickly heat. A similar eruption appears on infants, called *red gum*.

Some people are subject to an eruption which appears in the form of scales, called *dry tetters*.

A peculiar eruption in the form of flattened lumps, that appear and disappear suddenly, coming out mostly in the evening, and attended with heat and itching, is called *nettle rash*.

A kind of vesicle, appearing about the breast and other parts where there is the most warmth and moisture, attended with a considerable fever and other important constitutional symptoms, is called the *miliary tetter*, or *miliary fever*, from the resemblance of the eruption to a millet seed. In the latter affection there is an unusual acidity of the sweat. Other eruptions have with some reason been ascribed to an acid state of the system.

Treatment.—An emetic or a course of medicine will be very serviceable in many of these cases: the patient

taking pretty freely of soda, or oyster shell lime water. The parts should be bathed in weak ley, daily followed by a wash of 3d preparation and sumac decoction; afterward applying a poultice made of the bark of green osier, and the bruised root of the yellow dock; or the tetter ointment. The alterative, or the sarsaparilla syrup should be used for a length of time.

CORNS.

Hardened lumps of cuticle, caused by tight boots.

Treatment.—Bathe them a long time with weak ley, shave them down, and apply a piece of bladder moistened with nerve ointment. Wear larger boots.

CHAP. XIX.

DEFORMITIES.

RICKETS.

SYMPTOMS.—Uncommon size of the head—swelling of the joints—flattening of the ribs—bending of the back—protuberance of the belly—general emaciation, and softness and inability of the bones to support the body.

Causes.—The proximate cause, is a weakness, softness and yielding of the bones. It commences in infancy, generally about the last period of nursing; and it is supposed to arise from a want of phosphate of lime in the nurses milk.

Treatment.—This requires a tonic and strengthening course. The patient should be induced to drink freely of a tea of poplar and bayberry and a little cayenne.—His skin should be frequently rubbed with suds of castile soap, and afterward dashed over with cold salt water.—Oyster shell lime water should be given three or four times a day, taking care not to have it too strong. Onions should be much used as a diet. A soup made by boiling the bones of veal or beef a long time will be very

good. But perhaps a new nurse with a fresh breast of milk will be the most effectual remedy that can be devised.

GOITRE.

SYMPTOMS.—This is an enlargement of the thyroid gland upon the fore part of the neck, and though not dangerous, is unsightly, and often troublesome from pressing on the wind pipe and impeding respiration.

Cause.—From the fact that this defect most frequently appears in certain sections of country, it is supposed to arise from some peculiarity in the climate, or water.

Treatment.—Stimulating applications, friction, and pressure. These will excite the absorbents to remove the tumor. We have known the pressure of an ordinary stock succeed in curing. The ashes of burnt sponge, and 3d preparation may be applied.

WHITE SWELLING.

SYMPTOMS.—A swelling of the knee, ankle, or wrist, which, frequently increases to a large size without the color being much altered, excepting, that they are sometimes more white and shining, hence their name. After some time they frequently suppurate and discharge.

They are divided into two kinds the scrofulous, and rheumatic.

The first is known by the pain commencing before the swelling, confined to one point, and abating as the swelling increases: Whereas in the latter, the pain arises after the swelling, extends over the whole joint, and increases with its size. The constitution often suffers generally, and sometimes, if not cured, they prove fatal.

Treatment.—Courses of medicine, and the spice biters are often required to restore the general health; besides the joint should be steamed several times a day, over a strong decoction of wormwood, tanzy, and hops, with a pint of soft soap. Hot stones may be put into the liquid, the joint placed over it, and covered with a blanket. This operation has a most decided effect, in removing the pain, dispersing the swelling, or hurrying on suppuration, and thus bringing the disease to a crisis. After

the steamings, bathe thoroughly with the stimulating liniment—sometimes with the nerve ointment; then bind it up tightly with a piece of open cloth; and apply over this, the stimulating poultice. When it breaks, the opening should be well syringed with weak ley, afterward, with astringents. The alterative syrup should not be neglected. This complaint is slow to cure, and requires perseverance.

CHAP. XX.

DISPLACEMENTS.

HERNIA OR RUPTURE.

This is an obtrusion of the bowels, and the membrane that covers them, through an opening in the walls of the abdomen. It most commonly occurs at the groin, and is then called *inguinal hernia*; when it descends into the scrotum, it is called *scrotal hernia*; above the groin, it is called *femoral hernia*; when at the navel—*umbilical hernia*. When the obtruding organs can readily be put back it is said to be reducible; when they have formed an adhesion to the external parts, it is called irreducible. When the bowel is compressed by its contents, and the narrowness of the opening, it is said to be strangulated. It is from the latter circumstance that the greatest danger of hernia arises. When it is strangulated, pain, inflammation, and sometimes mortification are the result.

Causes.—Straining the abdomen by violent exertions; excessive crying in children, and hereditary tendency.

Treatment.—In infancy a rupture may often be cured by the use of compresses or trusses, and applications to contract and strengthen the parts. Perhaps the most successful is a plaster of the extract of white oak bark.

Whenever this is taken off, the part should be well rubbed with the white of eggs and No. 6. It happens

sometimes that the bowel comes down, and becomes strangulated so that it cannot be pushed back. Surgeons are in the habit of operating for this; but it is a dangerous practice, and has destroyed hundreds. Strangulated hernia, where there is no adhesion, may almost universally be reduced, by bathing in warm, weak ley, steaming the patient, and relaxing him with lobelia. When these applications have been made a sufficient length of time, let the patient lie so that the rupture shall be uppermost, at the same time bending the body forward: then grasping the hernial sack, pressing the hernia so as to make its base as small as possible, and with the other hand press on its top. It often requires some time and perseverance.

PROLAPSUS ANI.

This is a protrusion of the rectum through the anus, which sometimes becomes habitual, and very troublesome. It occurs mostly in infancy and old age; and is caused by weakness, purging, costiveness, and straining at stool. A degree of it is sometimes caused by piles.

Treatment.—In common the part should be immediately returned with the hand, the fingers being oiled; after which strong astringent injections should be used—a decoction of white oak bark, or cranes-bill and myrrh, and the bowels be kept loose by the use of the unbolted wheat bread. When inflammation makes it difficult to return the intestine, it may be previously well bathed in a warm suds of castile soap, to which the tincture of lobelia may be added.

PROLAPSUS UTERI.

This is a descent of the uterus into the vagina; sometimes so much as to extend beyond the external parts; and is attended with pains in the lower part of the back, groins, and thighs; uneasiness about the hips, and a sense of fulness, and bearing down, increased by walking. A discharge like flour albus commonly occurs; there is difficulty of passing urine and feces; and the general health is frequently impaired. It is caused by debility, and excited by too much walking, dancing, difficult parturition, &c.

Treatment.—Give occasionally a light course of medicine, with a liberal use of the female restorative. The uterus may be supported in its place by a suitable piece of sponge well saturated with some strong astringent decoction. A piece of ribbon may be attached to the sponge for its removal. Whenever it is withdrawn, the female injections should be used. A strengthening plaster should be put on the back. The abdominal supporters found in the medical markets, are sometimes very useful.

[NERVOUS DISEASES—CHRONIC.]

CHAP. XXI.

SPASMODICS—CHRONIC.

EPILEPSY.

SYMPTOMS.—In this disease the patient often falls down suddenly, and becomes convulsed and insensible, the eyes roll wildly—the tongue is protruded—the teeth gnash together—the mouth foams—the countenance is horribly distorted, and the body often whirls rapidly about. Sometimes the face is pale; sometimes purple. Some patients return suddenly to consciousness; and others remain drowsy and stupid several hours. It is periodical in some, occurring in various times, from every day to several months. It usually attacks during sleep, and happens the oftenest when the patient is most debilitated. It is found in a variety of degrees and symptoms.

Causes.—Worms; disordered state of the stomach and bowels; poisons; alcoholic drinks; excessive venereal indulgence; violent emotions; but most commonly some organic affection of the brain or spinal column.

Treatment.—The paroxysms can generally be very much alleviated by a prompt use of 3d preparation.—When the cause is in the bowels, courses of medicine; or

when it is caused by worms, courses of medicine, and vermifuges, as given under the head of worms will often cure. The same treatment has also been known to lessen the frequency of its attack, in cases that were obstinate. There is generally a determination to the head, resembling apoplexy, which requires the foot or hip bath, and rubbing the lower extremities with vinegar tincture of cayenne, or stimulating liniment; and cold applications to the head. Care must be taken to prevent the patient from injuring himself during the paroxysms. An invigorating regimen should be employed.

ST. VITUS DANCE.

SYMPTOMS.—An involuntary action of the muscles, most generally confined to one side, and most frequently appearing on the attempt of some voluntary motion.—Sometimes some one or more of the limbs are constantly in motion; yet on some attentive effort, like levelling a gun, they are perfectly steady. It is remarkable that the sound of the violin, or some other music, generally composes the patient. In some cases the spasmodic motions are so constant and perplexing, that the patient cannot feed himself, or even walk. The countenance often becomes pale and unexpressive; the muscles are flaccid and weak; and the bowels costive.

Causes.—Excessive sensual indulgences, and nervous excitements; exposure to cold; poor living; and any debilitating thing. This singular disease has been communicated by sympathy.

Treatment.—Courses of medicine; relying much on injections containing lobelia. The nerve powder, and spice, or wine bitters should be constantly employed.—The shower bath should be used after steaming.

“The success of the Thomsonian practice in this disease has been unbounded. Probably there never has been a case of St. Vitus Dance in the hands of a judicious practitioner—one upon whom a thorough treatment has been put in requisition, without either experiencing great benefit, or a radical cure. The writer of this notice has seen one case of seven years standing, perma-

nently cured by one course of medicine."—*A. N. Worthy, M. D.*

ASTHMA.

SYMPTOMS.—A spasmodic affection of the lungs, attended with frequent, difficult, and short respiration, together with a wheezing noise, tightness across the chest, and a cough. It comes on, in paroxysms, mostly at night; and the symptoms are much increased when the patient lies down. Dyspeptic symptoms usually attend it. When it has once taken place it is apt to occur periodically, particularly upon changes of the atmosphere, obstructions of perspiration, inhalation of dust, &c.

Treatment.—Lobelia is now acknowledged by the authors of every school, as the most sovereign remedy for asthma. In mild cases, or what is commonly called phthisic, a few doses of tincture of lobelia in composition at suitable intervals, may effectually relieve it. In worse cases, courses of medicine should be given, using the cough drops, or cough balsam, and putting a stimulating plaster on the chest. Inhaling the smoke of burning paper, previously wet in saltpetre water has been found to give immediate relief.

PALSY.

SYMPTOMS.—A sudden loss of sensibility and motion in one or more of the muscles; frequently one half of the body is affected from above downward, and sometimes only the lower extremities. It is often attended with drowsiness, and is sometimes preceded by numbness, coldness, paleness, and slight convulsive twitches. When the head is much affected, the face is drawn to one side, and the memory and judgment are much impaired. In some cases the motion is lost and not the feelings, and vice versa.

Causes.—Sedentary and luxurious living; excessive mental application; lead; mercury, and other poisons; apoplexy, and injuries of the head and spine.

Treatment.—When this disease attacks violently, its character is closely related to apoplexy, and requires a similar treatment. Friction with vinegar tincture of cay-

enne along the spine and on the extremities is very beneficial. Stimulating injections are often necessary, on account of the inactive state of the bowels, and the catheter is sometimes required to be used to draw off the urine.—Tonics should be plentifully taken, with a large portion of cayenne, prickly ash, or other stimulants. Frequent steaming, or bathing the feet, should be employed. Electricity is a valuable application, judiciously applied, but it should always be followed by the vapor bath and cold dash.

NIGHT MARE.

SYMPTOMS.—The most remarkable of these occur during sleep. In mild cases it may be nothing more than a frightful dream, with a distressing sense of inability to escape the peril; or the patient fancies he is in danger of suffocation. In worse cases, there is a sense of weight and oppression of the chest, which he imagines is caused by some animal resting there, inspiring terror, impeding respiration, paralyzing voluntary motions; and in this situation he sometimes awakes, but is unable to move a limb, until relieved by a sudden crisis, or aroused by some person. It mostly occurs while lying on the back.

Causes.—Dyspepsia, wind and indigestible food in the stomach.

Treatment.—Many of the means required for removing dyspepsia will be necessary. Besides, a cup of composition and nerve powder, with a tea-spoonful of No. 6 should be taken at bed time. The patient should take light suppers, lie on his right side, be covered with light clothing, and if badly affected, have some watchful bed-fellow so that he may be aroused, whenever his groans or breathing indicate an attack.

CHAP. XXII.

MENTAL DISEASES.

HYPOCHONDRIA.

SYMPTOMS.—This is the lowest degree of mental disease, or more properly speaking, nervous disorder of the brain. It is characterized by gloomy and unhappy feelings—unfounded fears—various fancied diseases, and ridiculous vagaries with regard to the state of the body. The patient often has a melancholy fear of death—fancies he is dying, or even dead, and obstinately persists in the reality of his imaginations. It is generally attended with dyspeptic symptoms. But real dyspepsia is more common to middle age, with some degree of hypochondria as a system, and hypochondria, to the decline of life, with some degree of dyspepsia as a symptom.

Treatment.—Courses of medicine with the hip, or foot bath, and a tonic treatment, will do much good ; but as the disease has originated through the medium of the mind, to that must the curative means be mainly directed. The patient should be stimulated with unbounded faith in the medicine he takes ; and here, even the use of chicanery will be justifiable. But probably the most successful thing is to thoroughly convince the patient of his mental errors, and inspire him with a passionate resolution not to become the victim of morbid thoughts. The disease is generally attended with costiveness, for which the bile pills, and extract of dandelion should be used.

Regimen.—The unbolted wheat bread should by no means be neglected in this disease. Exercise too, is often superior to any medicine. Travelling, will in many cases be beneficial ; particular effort must be made to en-

gage the patient's mind in interesting, prosperous, and prospective business.

INSANITY.

SYMPTOMS.—This kind of mental disease exhibits itself by various morbid feelings, and sentiments, which control the patient to the utter disregard of truth or reason. As hypochondria is a disease of the intellect, or forntal portion of the brain, to which the feelings act in subservience ; so insanity is a disease of the feelings, or posterior portion of the brain, that controls the intellect. Insanity will exhibit as many characters as there are organs, or combinations of organs to be affected. The furious mania, springs from the excitement of combativeness and destructiveness ; conceit and vanity, from that of self-esteem and approbateness ; melancholy, and listlessness, from that of ideality and sadness, &c.

Treatment.—A lobelia emetic has the most decided influence over the mind of a maniac, of any medicine known, often making them entirely sane during its operation. Thorough courses of medicine have repeatedly cured insanity, permanently. Much attention should be paid to the bowels ; for they are generally torpid. The probability of cure will be much increased by the recentness of the attack ; or by its having arisen consequent to some physical disorder ; or by the patient being young, or from its having arisen from fear, or misfortunes. Those who treat the insane should secure both their affection and their reverence ; use them with the utmost kindness, but firmly persist in their obedience. Travelling, and active interesting labor are among the best moral means of cure. According to the reasoning, and experiments of Sunderland, pathetism is the most effectual agent known for the cure of this malady, whenever the patient can be affected by it ; and we expect that means will yet be found, by which the strongest may be pathetised ; and thereby the whole class of nervous diseases be found among the easiest to cure.

DELIRIUM TREMENS.

SYMPTOMS.—This peculiar kind of insanity, partak-

ing both of the nature of ordinary mania and hypochondria, is caused by the excessive and long continued use of spirituous liquors and opium. The wretched victim is sleepless; restless, and impelled with urgent motives to move from place to place. His hands tremble. He is sometimes boisterous and raving, perhaps fancies some one is going to rob or murder him. He is always haunted with the most disagreeable spectral illusions; sees snakes; disgusting insects, that torment him; and particularly devils. We knew a drunkard, who, in this disease, fancied that he was covered with hundreds of little insects, and every insect was a devil; this circumstance has given it the common name of blue devils.

Treatment.—Active lobelia emetics and injections, with the strongest astringents, using the foot and hip bath, will generally cure it. The patient should be indulged as much as possible, for there is much debility attending it, and when forcibly confined, his struggling has proved fatal. Several drunkards have been known to break themselves of their habits by using some of the Thomsonian compounds containing cayenne, as a substitute for spirits. Bitters, and cayenne, or the bread of life should be used a long time after delirium tremens; and if their benefit were generally known, the way to temperance would be much easier.

[PROPOGATED DISEASES—CHRONIC.]

CHAP. XXIII.

CONTAGIONS—CHRONIC.

SYPHILLIS.

SYMPTOMS.—This horrible disease exhibits itself by a disposition to ulceration in various ways. Very frequently with a discharge from the urethra or vagina, called *clap*; this in males is sometimes attended with an inelastic

state of the urethra, from inflammation or the deposition of lymph, which, when erections take place, which frequently happens during sleep, draws the penis downward, in an arch, causing severe pain—called a *chordee*. Sometimes ulcers of different aspects, appear on the genitals; and either slowly or rapidly, tend to inflame, corrode and destroy them—called *chancres*. In other cases, the lymphatic glands of the groin swell and suppurate—called *buboes*. On some occasions there are enlargements of the bones, called *nodes*. In other cases the whole system becomes affected, attended with ulceration of the throat and nose; copper colored spots, pimples, and ulcers in various parts; which if not arrested, the victim dies a mass of corruption—called *constitutional syphilis*. These effects are often produced or aggravated by the use of mercury.

Treatment.—In its first stages stomach pills, or lobelia in broken doses will often effect a cure. The oyster shell lime water, and the gelatin capsules, or copavia balsam, should also be used—while lobelia rallies the powers of life, these destroy the poisonous virus. The sarsaparilla, or alterative syrup may be used with good effect. In bad cases, besides these articles, courses of medicine are very necessary and effectual. The chancres &c., will require a treatment similar to what is found under ulceration; such as washing with weak ley, and astringents; sprinkling with bloodroot; and poulticing.

ITCH.

SYMPTOMS.—Commencing by the appearance of watery pimples between the fingers, and extending over the body, attended with severe itching, particularly on taking off the clothes at night. In bad and neglected cases there is pretty extensive ulceration, and scabbing, and the appearance of biles. A species of a more malignant character prevails in the Western States, called *prairie itch*.

Treatment.—Mix sulphur with hard soap, add a little spirits turpentine, and rub it over the surface of the body on going to bed, and be rolled in a sheet for the purpose. In the morning, wash it all off with warm water. A few

applications is an effectual cure, and has the advantage of taking a greater effect on the skin, and of avoiding the smell attending the use of the common sulphur and lard ointment. Where there is ulceration, the meadow-fern ointment should be applied several times during the day.

RING WORM.

SYMPTOMS.—Red circular patches on the skin, filled with little pustules, which turn to brownish scales in the center, while new pustules continue to enlarge the circle on its margin, attended with itching and stinging. It seems to have several varieties ; some are transient, while others continually reappear, and trouble the patient a long time. It occurs most frequently on the face, neck, and breast of children.

Treatment.—Apply the anti-scorbutic, meadow-fern, or itch ointment, use freely of the sarsaparilla, or alterative syrup.— The tincture of garden celandine is recommended by Dr. Beach for this and other eruptions.

SCALD HEAD.

SYMPTOMS.—A chronic inflammation of the scalp, commencing in spots of a brownish appearance, from which arises an offensive matter that mats the hair together, and forms into thick scales. It sometimes spreads over the whole head, affects the lymphatic glands of the neck, and causes a discharge from the ears.

Treatment.—The scabs should be taken off with soap suds, and the head well washed with a strong decoction of sumac, afterward apply the *anti-scorbutic ointment* and cover the head with a light cap of oiled silk, or bladder. The meadow-fern ointment, itch ointment, or an ointment of tar and lard will all, or either of them be useful. The alterative syrup will always be advisable ; and in some cases, courses of medicine will be indispensable.

CHAP. XXIV.

HEREDITARIES.

SCROFULA.

SYMPTOMS.—Swelling and ulceration of the lymphatic glands, particularly those of the neck and breast. Sometimes there is only an enlargement of the glands which may not change for years. At other times they inflame, and at length commence a protracted discharge of a whitish curdled fluid that is sometimes very corroding. The general health often suffers materially, and the eyes are inflamed. The tubercles of consumption, diseased mesenteric glands, and the white swelling, are supposed to be of the same nature as scrofula.

Treatment.—Occasional courses of medicine; with composition and the alterative syrup in the intervals; and an occasional use of the bile pills. The vapor bath may often be employed. The constant use of agrimony as a tea has been said to cure. But the best medicines are temperance, and an invigorating regimen.

CANCER.

SYMPTOMS.—These commence with a scirrus or hard lump on some glandular, or soft part, most commonly about the face or breast; which is the result of some previous inflammation. At length it begins to inflame, attended at times, with twinges, or sharp lancinating pains, like needles or slivers running through the part. Finally ulceration succeeds, discharging a corroding fetid fluid. The edges of the ulcer are ragged, elevated, and often very painful. The disease often rapidly destroys the surrounding parts, and the miserable patient is consumed alive.

Treatment.—A caustic plaster made by boiling the ley of hickory wood, or red oak bark, has cured a number. Much advantage will be had by washing or syringing them with ley as strong as can be borne. The inspissated juice of the wood sorrel is very effectual. Thomson found much benefit from the extract of the tops of red clover. Poultices of grated yellow dock roots, with a free use of the tea to drink, has also cured. A decoction of green osier, or red willow, drank and applied, is thought very serviceable. The oyster shell lime water, and the alterative syrup should be used. The use of lobelia, and courses will do their part. The bile pills should be frequently used. Before the tumor has ulcerated, it should be steamed frequently over an infusion of bitter herbs, and strong soap suds; and the medicines freely taken. Thomson recommends burning spunk on the tumor to induce suppuration. After ulceration has taken place, apply the sorrel plaster, until it becomes painful; then wash it well with ley; then with a strong decoction of sumac; then apply a salve of beefs gall and blood root; and so alternate.

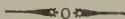
WORMS.

SYMPTOMS.—Variable appetite—fetid breath—acid eructations, and pains in the stomach—grinding of the teeth during sleep—picking at the nose—paleness of the countenance—hardness, and fulness of the belly—slimy stools—occasional griping pains—short dry cough—slow irregular fever—emaciation of the body—irregular pulse, and sometimes, convulsions. The most certain symptom of the tape worm, is the passage of portions of the animal in the stool. The pin worm is known by tickling heat, and itching of the rectum.

Treatment.—For mild cases, give a teaspoonful pulverized balmony and skunk's cabbage, equal parts, cayenne a tenth part, in milk or molasses, 3 times a day, together with from 1 to 3 stomach pills. In urgent cases the wormseed oak of Jerusalem, or its oil, may be added to the above; Dose from a half to a teaspoonful of the seed; of the oil, from 4 to 10 drops on sugar.

PART IV.

MATERIA MEDICA.



CHAP. I.

THOMSON'S NUMBERS.

NO. 1. EMETICS.—“*To cleanse the stomach, overpower the cold and promote a free perspiration.*”

LOBELIA INFLATA.

1st Preparation.—The plant pulverized. The leaves and pods thus prepared, are called *green lobelia*, and the seeds, *brown lobelia*. These are the forms commonly employed for an emetic. The brown has about twice the strength of the green.

2d Preparation.—The green herb bruised and tinctured with spirits, or vinegar. Used for bathing—for coughs—a good emetic for children.

3rd Preparation.—Brown lobelia tinctured in No. 6, to which is added, according to judgment, cayenne, nerve powder, and soda. The most prompt emetic known. Valuable for spasms, poisons, and suspended animation.

Blue vervain, and boneset, are good emetics. Blood root is an emetic that has a special action on the throat. It is harsh alone, but its addition to lobelia is an improvement for croup, bronchitis, &c.

NO. 2. STIMULANTS.—“*To retain the internal vital heat of the system, and cause a free perspiration.*”

CAYENNE—CAPSICUM BACCATUM.

It is prepared by pulverizing the pods or tincturing them in spirits, or vinegar. The oil may be obtained by making a tincture with ether, and evaporating it.

The garden pepper, ginger, black pepper, and peppermint plant belong to this class.

No. 3. ASTRINGENTS.—*“To scour the stomach, and bowels, and remove the canker.”*

THE BAYBERRY ROOT BARK, WHITE POND LILY ROOT, INNER BARK OF HEMLOCK, RED RASPBERRY, WITCH HAZLE, AND SUMAC, ARE THE MOST USED OF THIS CLASS. Take the berries of sumac, (*Rhus glabrum*) dried in an oven, and rub off the dust through a sieve. This powder, mixed with Bayberry, is valuable for cankered sore mouths, ulcers, and all cases of canker. Astringents are generally prepared by decoction. See Therapeutics, and false membrane, p. 121—256.

No. 4. TONICS.—*“Bitters to connect the bile, and restore digestion.”*

GOLDEN SEAL, BALMONY, POPLAR, and UNICORN, are among the best of this class. See the bitter compounds in the 11 Chap. and Tonics, p. 122.

No. 5. STOMACHICS.—*“Syrup for the dysentery, to strengthen the stomach, and bowels, and restore weak patients.”*

Take poplar, and bayberry, 1 pound each, boil in 2 gallons of water, strain and add 7 pounds of sugar, scald and skim; then add half a pound of pulverized PEACH, or CHERRY STONE MEATS; and when cold, a gallon of good brandy.

BITTER ALMONDS, or WILD CHERRY BARK may be used as a substitute for peach meats. See p. 134.

No. 6. ANTISEPTICS.—*“Rheumatic drops, to remove pain, prevent mortification, and promote a natural heat.”*

Take one gallon of FOURTH PROOF BRANDY, or ALCOHOL, pulverized MYRRH, one pound, CAYENNE, two oz. Put them into a stone jug, and boil a few minutes in a kettle of water, leaving the jug unstopped. It may be prepared without boiling, by standing in a warm place several days.

This is often called hot drops. Bayerry, golden seal, &c. is sometimes added. BALM OF GILEAD BUDS, are a pretty good substitute for myrrh.

CHAP. II.

ADMINISTRATION OF MEDICINES.

EMETICS.

Previous to an emetic the system should be well prepared by letting the patient drink freely of composition, and two or three stomach pills every twenty minutes for two or three hours. In some chronic cases, these medicines may be used several days previously, but not so often.

Put into a tea-cupful of strong bayberry, or some other astringent decoction, a tea-spoonful of the green lobelia, or half the quantity of brown. Let the patient take one third of this every ten minutes, one half every fifteen minutes, or the whole every half hour, as may be advisable. This quantity is generally taken three times. But if it does not then act sufficiently, it may be repeated to the fourth, fifth, or even the sixth time. If vomiting lingers give No. 2 and saleratus water. A change of position will often assist vomiting. This is attributed by Dr. Mattocks to the propulsion of the medicine upon the pylorus, or lower opening of the stomach, which is very sensitive. For this reason he directs the patient to lie on the right side when they wish to favor the operation of an emetic or cathartic, and vice versa. After every spell of vomiting, the patient should drink freely of bone-set, or pennyroyal tea. In chronic cases, bayberry or some other strong astringent should be used freely during the operation. Composition is not advisable at this time, as it disgusts the patient against it afterward. Toward the close of vomiting, milk porridge or water gruel should be drank. When it is wished to produce considerable

relaxation, the brown emetic should be used in tea-spoonful doses, and also given by injection. For a quick emetic, give the vinegar tincture, soon followed by a cup of saleratus water. If mixed together and given while foaming, patients who refuse the medicine may be deceived.

A variety of unusual symptoms occasionally take place during the operation of an emetic. Some are apt to have a severe pain in the stomach and bowels, like cholic.—No. 6 and the vapor bath are good to relieve these.—Sometimes great nervous agitations occur, or even delirium and spasms. These are the effect of taking opium, or some serious nervous disease. Give No. 2, and nervines. In other cases, which have received the name of *alarming symptoms*, the patient becomes relaxed or prostrated, lies helpless, pants or sobs, and in some cases becomes entirely insensible to surrounding objects. These occur most frequently in chronic disease, after the patient has had several courses of medicine. The results have shown them to be a favorable crisis; therefore their name is a 'false alarm.' In these cases, rub the extremities with vinegar tincture of cayenne; give cayenne, and wine bitters.

THE VAPOR BATH.

The apparatus for giving this bath may be constructed in various ways. The following is a very convenient method. To a hoop about 3 feet in diameter, suspend a curtain of tight cloth, 6 feet long, and enclosed excepting a space in one of the seams large enough for a person to put out his head, and a smaller one near the bottom to insert the steam pipe. Cover the top of the whoop with the cloth in such a manner that there may be a hole in the centre, large enough to admit a persons body; and made so that it may be drawn together with a string like a work bag. Have a tin pipe made, 5 or 6 feet long, so as to be put together in joints, with an elbow at one end, having the mouth of the pipe expanded so as to slip over the mouth of any teakettle; and at the other end a cup to catch the water that may be condensed, with a cover full of holes to spread the steam. A handful of aromatic

herbs may be put into the cup, thus constituting the medicated vapor bath.

To operate with this, suspend the curtain to the wall overhead at a suitable distance from the fire. Fill the tea-kettle with water up to the spout, but not above it. Lay under the cover, a peice of cloth, or paper, so as to make it steam tight. The pipe at the spout may then be put on, and fastened with similar packing, the other end being inserted into the curtain. A chair should be put within, for the patient to sit on. He should be stripped of his clothes, and furnished with a pail of hot water to bathe his feet, and a piece of castile soap and a sponge, to wash his surface ; especially for the first bath in a course of medicine. If there is much obstruction, the steam should be raised gradually, and continued from half to three quarters of an hour. While in the bath, the patient should drink freely of composition. If faintness occur, which is neither uncommon, nor alarming, give him a sponge wet with cold water to rub over his face and breast. Patients often ask for cold water while going through a course of medicine. If it be given in small quantities at a time, and a free perspiration kept up, it will do no harm at any time, but have a very fine effect, and promotes sweating. When the patient comes out of the bath, wet his body and limbs uniformly with cold water ; or if this be objected, warm salt and vinegar and water may be substituted. It tones the skin, preserves the heat, and prevents taking cold. It may be omitted after the first bath in a course of medicine.

In order to take the *hip bath*, all that is necessary is, to open the top of the curtain, and bring it down to the waist, and fasten it there by drawing the string. This application of the vapor bath has the advantage of being applicable a much longer time, without producing faintness, than the other way ; and is also highly useful in determinations to the head, female obstructions, and diseases of the urinary organs.

When such an apparatus is not at hand, there is a very simple and not inconvenient method of steaming, which was commonly practised by Thomson and the early practitioners. Place the patient in a chair ; cover him with

two thick blankets, pinned around his neck, or drawn over his head, as the case may require; under the chair put a shallow vessel of hot water; and having heated several stones of different sizes, proceed with the operation by putting the largest into the water first.

When a patient cannot sit up he may be steamed in bed. Take several barrel hoops, cut off a few inches of each end, and nail across them several strips of wood, so as to make a frame to cover the patient, over which the bedding is to be thrown. Having heated two or three stones, hold them in water till done hissing, then wrap them in wet cloths, afterward in dry ones, and place them to the patients feet, and sides.

While the patient is in the bath ventilate the room, by increasing the fire, and opening the doors and windows.

ENEMAS, OR INJECTIONS.

For an injection to move the bowels.—Take composition and nerve powder, a teaspoonful each, a half a pint of boiling water, settle, or strain, and add molasses, and a little sweet oil, or melted lard.

For a relaxing injection.—Take brown lobelia, nerve powder, and No. 6, a teaspoonful each, composition tea, a sufficient quantity.

For a stimulating injection, a teaspoonful of cayenne should be added, and the lobelia, in some cases left out.

For a dysentery.—Use a strong decoction of sumac, tar water, and slippery elm mucilage.

For piles.—Use a strong decoction of cranesbill, or witch hazle, and retain them over night.

To administer them.—Fill the syringe, and smear the tube with lard or tallow; elevate the pipe, and push the piston, till the liquid flows out, so as to exclude the air. The patient may generally perform the operation himself, except discharging the syringe, without uncovering. And if provided with one having a bent tube, he may perform the operation wholly alone. Sometimes they pass soon, with little effect, and should be repeated. Sometimes they are retained an unusual time, in which case several may be administered. In bad cases, where it is

desirable they should be retained, they may be held up with a cloth.

COURSES OF MEDICINE.

These consist in the application of the means just described, in a regular series ; designed to cleanse the whole alimentary canal, equalize the circulation, and restore the secretions ; and are therefore applicable to all diseases ; without an exception.

A light course.—No. 1.—Give the patient freely of composition, cayenne and bayberry, or some other astringent and stomach pills ; bathing his feet at the same time in hot water, adding to the temperature, as fast as the feet will bear it. Then put him in bed, and give an emetic as before described.

A full course.—No. 2.—Commence with the preparatory medicines and bathing the feet ; then give an injection ; then the emetic ; and as soon as this is done operating, no matter if a little before, give the vapor bath.

A thorough course.—No 3.—This consists in the administration of the preparatories, of an injection of brown lobelia, a bath, the emetic, and then another injection, and bath. If the lobelia has made sufficient impression it may be left out of the last injection. The cold dash, also, will not be necessary after the first bath.

A long course.—This consists simply in prolonging the emetic, by giving frequent nauseating doses of lobelia, and then increasing the quantity, so as to produce vomiting every hour. It may be applied to either of the other courses ; thus a long light course, a long full course &c. Highly successful, where there is much inflammation, or obstruction.

CHAP. III.

COMPOUNDS.

COMPOSITION.

The Thomsonian Panacea.—Take Bayberry 2 lbs., of ginger 1 lb., Cayenne 2 oz., cloves 2 oz., finely pulverized and mixed. This is a highly valuable and pleasant medicine in colds, head-ache, or pains in any part, bowel complaints, cold hands and feet, female complaints caused by cold. In fine it is almost universally applicable in disease. Directions, 1 teaspoonful in a cup of hot water, with milk and sugar, repeated at discretion.

TONIC COMPOSITION.

Take bayberry 4 lbs., poplar 2 lbs., inner bark of hemlock 2 lbs., black birch 1 lb., cayenne 1-2 lb., cloves 1-2 lb., sassafras 1-2 lb., pulverized and mixed. We have found this formula very effectual for debilitated patients, and chronic diseases.

DIAPHORETIC COMPOSITION.

Take bayberry 1 lb., ginger 1 lb., pleurisy root 1 lb., peppermint plant 2 oz., cayenne 2 oz., pulverized and mixed. Valuable in fevers, inflammations, colic &c.

ANTI-DYSPEPTIC CONSERVE, OR BREAD OF LIFE.

Take poplar, goldenseal, bayberry, ginger, lady's-slipper, cinnamon, and cloves, each 2 oz., loaf-sugar 4 lbs., all finely pulverized. Mix these articles into a stiff dough with slippery elm mucilage, or some other similar substance; adding an ounce each of the oils of pennyroyal and spearmint. Form into cakes to suit the fancy, and dry in a gentle heat. This preparation may be car-

ried in the pocket, and eaten freely. It is beneficial in coughs, consumptions, faintness at the stomach, dyspepsia, jaundice, loss of appetite, sore throat, mercurial salivation, and scrofulous affections.

It warms and invigorates the system, in cold weather, and dissipates the languid or drowsy feelings which are so often experienced on the return of spring. Travelers, who are much exposed to a changeable climate would find it a valuable preventive of disease. It is a valuable substitute for tobacco, alcoholic drink, of all kinds.

DYSPEPTIC POWDERS.

Take poplar 2 lbs., goldenseal 4 oz., cayenne 2 oz., brown sugar 4 lbs. ; add 1-2 an ounce of essence pennyroyal, mix thoroughly. Useful in dyspepsia, costiveness, affections of the liver, and general debility.

They are a superior remedy for distress occasioned by food, loss of appetite, faintness at the stomach, general debility, and a sovereign remedy for dyspepsia, if persevered in.

Dose.—A teaspoonful may be taken in wine, warm water, or, if more convenient, a glass of cold water, from three to five times a day.

SPICE BITTERS.

Take poplar 2 lbs., goldenseal, balmony black cherry, 4 oz. each, ginger, prickly ash, cloves, the young plant of the spicy wintergreen and cayenne 2 oz. each, sugar 4 lbs., mix.

Dose.—A teaspoonful in hot water with milk.

2nd Formula.—Take poplar, bayberry, and goldenseal 1 lb. each, cayenne and cloves 4 oz. each, sugar 3 1-2 lbs. These bitters are a superior remedy for weak stomachs, pains of the head, stomach, or bowels, inactive circulation, coldness of hands and feet, loss of appetite, impurities of the blood, etc.

Directions.—Tea-spoonful in warm water, sweetened with sugar, before each meal. Or put two ounces into a pint of hot water, and add 4 oz., of loaf sugar and a quart of good wine. Take a half wine glass, as often as directed for the powder.

WINE BITTERS.

Take poplar 2 lbs., bayberry 1 lb., goldenseal, balmony, unicorn, quassia chips, and scull-cap 4 oz., cayenne 2 oz. Put into water and boil in a covered vessel to 2 quarts. Strain, add 3 lbs. of sugar, scald and skim.—Then steep by a gentle heat, prickly ash berries, cinnamon and all-spice, 2 oz. each, in a gallon of sweet malaga wine, strain, and add to the above when cold.

Dose.—A wine-glassful 2 or 3 times a day.

2nd Formula.—Take balmony, bayberry, cassia buds, and bitter-root 8 oz., golden seal 12 oz., anise seed 4 oz., cloves 2 oz., cayenne 1 oz., brown sugar 3 lbs., pulverized and mixed; put 1 oz. of the powder steeped in hot water to a quart of wine. These are said to be the celebrated wine bitters prepared by Dr. John Thomson. The wine bitters are a very pleasant restorative for debilitated people and convalescents. Very useful in dyspepsia, sick-headache, heart-burn, sinking, torpid feelings, and whenever a tonic is required.

FEMALE RESTORATIVE.

Take poplar 2 lbs., unicorn 1 lb., beth root and nerve powder 8 oz., golden seal, balmony, boxwood flowers, and myrrh, 4 oz. each, cinnamon, cloves and cayenne, 2 oz. each—well pulverized, mixed and sifted—to which add loaf sugar, pulverized, 4 lbs.

Dose.—1 tea-spoonful in warm water, with milk and sugar. This is a valuable article for flour albus, prolapsus uteri, and any female weakness. It is a good tonic in any case; useful for pulmonary consumption, dyspepsia; for coughs, and bleeding at the lungs. Or 2 oz. of the powder may be steeped in a pint of water, when cool, add 1 qt. of wine, and 4 oz. sugar. Dose, a wineglass, three times a day.

NERVE POWDER.

Take the root of the Lady's slipper, and the leaves and stalk of skull-cap, pulverized, equal parts. Or either may be used separately. This medicine is highly valued for nervous affections, wind in the stomach, irritation and agitation of the nervous system. They strengthen the nerves, compose the mind, and promote a calm and nat-

ural sleep. These powders are far preferable to opium and are perfectly safe.

Directions.—From a half to a tea-spoonful in warm water, or they can be taken in a tea of the vegetable composition, from one to three times a day.

COUGH OR FEVER POWDER.

Take skunk-cabbage and white-root, 4 parts each; horehound and wake-robin 2 parts each, lobelia, cayenne, bayberry, bitter-root, and nerve powder, 1 part each; pulverized and mixed.

Dose.—1 tea-spoonful in hot water or composition tea, with sugar and milk; or it may be taken cold in molasses or milk. Very good to loosen a cough; and a good medicine in fevers and inflammations.

AGUE POWDER.

Take yellow peruvian bark, prickly ash berries, cloves, black pepper, and cream of tartar, 1 oz. each; cayenne pepper half an oz.; infuse in a little hot water, and add 2 quarts of brandy or wine. *Dose.*—A wine-glassfull several times a day before the paroxym. This preparation will almost infallibly arrest the ague and fever.

STIMULATING TEA.

Take cayenne, bayberry, ginger, white-root, and scull-cap, 1 tea-spoonful each; green lobelia half a tea-spoonful. Steep in a bowl and keep warm by the fire.

Dose.—2 or 3 swallows every 15 or 20 minutes. Very effectual in acute attacks.

DYSENTERY POWDER.

Take bayberry, inner bark of hemlock, white oak bark, black cherry bark, witchhazel leaves, poplar bark, golden seal, blackberry root, cranesbill, black pepper, all-spice, cinnamon, and myrrh, 4 oz. each; cayenne and cloves, 2 oz. each. Steep 2 oz. of the powder in 1 quart of hot water. *Dose.*—1 tea-cupfull every 2 hours, sweetened with loaf sugar. *Directions.*—Put these powders into 3 pints of water boil and strain, add loaf sugar sufficient to sweeten it sweet, also one pint of good brandy.

This powder is a sovereign remedy in diarrhea and

the forming stages of dysentery and cholera. From half to a wine glass full may be taken at a dose, repeating it every hour and a half until a cure is effected, or if the case is severe a full dose of composition and No. 6, should be taken once in two hours.

WORM POWDER.

Take 1 oz. of wormseed, (oak of Jerusalem) bitter root, balmony, skunk-cabbage 1-2 oz. each. Pulverize, and give a teaspoonful from three to five times a day in molasses, or milk. Very safe and good to destroy worms, and restore the appetite.

CATARRH SNUFF.

Take bayberry 3 oz., bitter root 1 oz., colts-foot, snake-root, leaves and roots, myrrh, gum arabic, and blood root, 1-2 an ounce each. All very finely pulverized and mixed. Good for catarrh, obstruction of the nose from cold, polypus &c.

SMELLING SALTS—HARTSHORN.

Take sal-ammonia 1 part, quick lime 2 parts, pulverize separately, put them in a vial, add a little essence of golden rod, and keep corked tight. Good to hold to the nose for faintness, suspended animation, and headache.

COUGH BALSAM.

Take fir balsam 2 oz., honey 2 oz., alcohol 1 pint. Let these stand in a close corked bottle 10 days, shaking it frequently. Then filter, and add 1 pint of the tincture of lobelia. *Dose*, from 1-2 to a tea-spoonful, several times a day. A valuable medicine in coughs, asthma, pain in the breast, croup, gravel, dropsy, gonorrhea, flour albus, and nervous affections.

IMPROVED RHEUMATIC DROPS, OR NO. 6.

Take hemlock bark, and poplar, each 4 oz., black cherries mashed, 1 lb., steep in 3 pints of brandy; strain and add 12 oz. of myrrh, 2 oz. of cayenne, steep 2 hours, and stir constantly. Add 1 gallon of 4th proof brandy, shake it occasionally for a few days; then settle, and pour off. Alcohol may be used instead of the brandy, in which

case the compound must be boiled again, so that it may not be milky, and filtered. Besides the other additions, this formula has the advantage of extracting all the qualities of the myrrh, which is a gum resin, and requires both water, and alcohol to dissolve it. This medicine is universally applicable for pain, and soreness, internally and externally. It is an antiseptic, and good to prevent mortification.

RHEUMATIC OR STIMULATING LINIMENT.

Take white soap 5 lbs., dissolve it in 3 quarts of soft water, by boiling. Next dissolve camphor, oils of origanum, and rosemary, 4 oz. each, in 1 gallon of alcohol. Then boil 6 oz. of cayenne, in 1 quart of water 15 minutes. Add the ingredients together, and shake well. To be bathed on the surface for pain, inflammation, and swelling of every kind. Good to restore an action to the surface in congestion, cold feet and hands, &c.

INDIA RUBBER, OR GUM-ELASTIC LINIMENT.

Dissolve a suitable quantity of india rubber in 1 quart of linseed oil, made sufficiently hot. When cold, add 1-2 an ounce of oil of wormwood; the dust sifted from hops, cayenne, and myrrh fine, 1-2 an oz. each. Good for bruises, swellings, neuralgia, &c.

STRENGTHENING, AND ADHESIVE PLASTER.

Take common resin 1 lb., beeswax 4 oz., burgundy pitch 8 oz., mutton tallow 2 oz. Melt these together, and add sweet oil 2 oz., sassafras oil 1-2 an oz., cayenne, 1 ounce. Stir till cold, and work it in the hands like wax. To be spread on cloth, or soft leather. Good to be applied over almost any seat of pain; for sprains fractures, rheumatism, &c.

MOTHERS RELIEF.

Take patridge-berry-vine 1 lb., high-cranberry-bark, red-raspberry and unicorn 1-2 lb., each; boil in 2 gallons of water, to 3 quarts. Infuse in a qt. of warm brandy 1-2 pound of nerve power. Strain, mix and add 3 lbs. of sugar. *Dose*, from 1-2 to a wine glass full, from 1 to 3 times a day. This medicine should be used by every

pregnant female, 2 or 3 weeks previous to her confinement.

RHEUMATIC DECOCTION.

Take black cohosh, Prickly ash, and cocash roots, 1 oz. each, cayenne, 1 tea-spoonful. Steep in a quart of water. *Dose*, 2-3 of a cupful every 3 hours. Very effectual in rheumatism.

EYE WATER.

Take green osier bark, and rose leaves 1 oz. each; make a strong decoction, and filter well. Make it slightly alkaline, with castile soap, and add a little No. 6.

CHOLERA SYRUP.

Take poplar, black birch, bayberry, and blackberry root, 1 lb. each, golden seal, and balmony, 1-2 lb. each. Boil in 5 gallons of water 1-2 an hour, strain; add 15 lbs. of sugar; scald and skim. Take nerve powder, and peach meats, 1 lb. each, tincture them in a gallon of No. 6; strain and mix. Very good for cholera morbus, dysentery, diarrhea, &c.

PULMONARY BALSAM.

Take spikenard, elecampane, comfrey, skunks cabbage roots, and hoarhound tops 8 oz. each; wild turnip, blood-root, liquorice-ball 4 oz. each; boil in 2 gallons of water down to 1. Strain and add 4 lbs. of sugar, 1 quart of Jamaica rum, 2 oz. tincture of lobelia, and 1-3 of an oz. essence of wintergreen.

Dose, a table-spoonful 5 times a day. Good in affections of the lungs and chest.

DIURETIC CORDIAL.

Take queen of the meadow, parsley root, sweet elder bark, 1 lb. each; cleavers, juniper berries, pipsissewa, and spear-mint herb, 8 oz. each. Bruised, and boiled in 3 gallons of water down to 2; strain and add 7 lbs. of sugar, and 1 gallon of metheglin, or gin. *Dose*, a wine-glass full as often as necessary, till the desired effect is produced. Very useful in gravel, stranguary, and dropsy.

ALTERATIVE, OR SARSAPARILLA SYRUP.

Take american or foreign sarsaparilla, 6 lbs., guaiacum shavings 3 lbs, sassafras, yellow dock root, elder flowers, burdock seed, green osier bark, and meadow fern burrs 1 lb. each. Add 1 gallon of cheap spirits, and 1 gallon of water, boil and

pour off ; then add water repeatedly, and boil till the strength is obtained ; reduce to 4 gallons, and add 25 lbs. of clarified sugar ; settle and pour off. *Dose*, a wine-glass full 4 times a day. Used in eruptive disease, syphilis, scrofula, and rheumatism. To clarify sugar, add 1-2 its weight of water, a few eggs, boil and skim.

NERVE OINTMENT.

Take burdock seed, seed of the buckhorn brake, wormwood, rue, camomile, and bitter sweet bark of the root, each 4 ounces; put them in a convenient vessel, cover with the oil of the common turtle, or neats-foot oil. Simmer them over a slow fire 12 hours ; then strain, settle, and bottle for use. Very effectual for swelled breasts, bruises, sprains, contracted sinews, callous, sore-throat. &c.

HEALING SALVE.

Take beeswax, salt butter, 1 lb. each, white turpentine 1-2 lb. balsam-fir 12 oz., myrrh 4 ounces; melt and simmer them together. Strain and add 2 oz. of finely sifted oyster-shell lime. Very healing and cleansing for burns, and ulcers of all kinds.

MEADOW-FERN OINTMENT.

Take meadow-fern burrs, and simmer them in fresh butter. Or make an extract, by boiling the leaves and twigs of the shrub, add an equal part of lard, and unite them with strong ley.

ITCH OINTMENT.

Bruise the roots of yellow dock ; simmer them in fresh butter at less than a scalding heat. To this add an equal part of meadow-fern ointment, and a little No. 6, and spirits of turpentine.

PILE OINTMENT.

Take finely pulverized nut-galls, and myrrh, 1 oz. each; mutton tallow 7 oz., oil of spearmint 1-2 an ounce. Use freely at bed time.

STIMULATING POULTICE.

Take warm yeast, 1 pint, salt and brown lobelia, 1 table-spoonful each, cayenne, 2 table-spoonfuls, soft soap, 1 tea-cupfull. Thicken with slippery elm and indian meal.—*Dr. John Thomson*. Very successful in inflammatory rheumatism, and other inflammations.

VEGETABLE CAUSTIC.

Take a quantity of wood sorrel, bruise it in a mortar, press out the juice, and dry it on shallow plates in the sun—to be

spread on cloth and used as a plaster to remove cancers and tumors.

2nd Formula.—Take the ley of Hickory ashes, evaporate it to dryness, and pulverize—Good to remove fungous flesh, fistules, cancers, &c.

STOMACH PILLS.

Take brown lobelia, 4 oz., cayenne and nerve powder, 1 oz. each, soda or saleratus, 1 oz., Castile soap shaved fine, and moistened, a sufficient quantity to work the mass into pills.—Dose from 1 to 5. Good in dyspepsia, liver complaint, headache, cough, and inflammation.

BILE OR PERISTALTIC PILLS.

Take ox-gall, evaporate it in a shallow vessel, by a gentle heat to the consistence of tar. Add pulverized culvers-physic or black-root sufficient to work into pills. Dose from 1 to 8. To be used in costiveness, dyspepsia, jaundice, and ill cases where the bowels require aid to move.

Remark.—An investigation has been lately going on by some of the medical men of Europe, into the nature of ox-gall, which places it in a very favorable light as a medicine. It prevents milk from coajulating, and dissolves it when it is coajulated. Dissolves hardened feces by a chemical action, and is proved to be, as Thomson says, the 'natural physic of the body.' It corrects the acidity of the stomach; has a general soothing effect and mitigates the pain of cancers &c. It may be used alone, but we have thought proper to unite it with the black-root (*Leptandra Virginia*) generally acknowledged as one of the most natural cathartics in the vegetable kingdom.

CATHARTIC OR BRANDRETH'S PILLS.

Take aloes 2 lbs., gamboge 1 lb., Colocynth 4 oz., castile soap 8 oz., shaved thin and softened in water, oil of cinnamon 1 drachm, oil of peppermint 2 drachms. Mix and form into pills. Dose from 2 to 4 generally preceded by the stomach pills.—These are said to be genuine Brandreth pills, If they are not they are equally as good or rather, as bad. Such cathartics are not useful, excepting in obstinate obstructions of the bowels.

CHAP. IV.

MEDICAL BOTANY.

INCLUDING SUCH PLANTS AS HAVE NOT BEEN MENTIONED, OR
SUFFICIENTLY DESCRIBED IN THE WORK.

Instead of the usual descriptions of plants, we merely give their systematic names. This saves much useless labor, for many may know most of them; and if not, few would trust to a common description alone. To take these botanic names to a botanic work, or an experienced botanist, is the surest method to become acquainted with plants, that we can point out to the reader. But their medical properties are too little known; these we give.

WHITE-ROOT, or PLEURISY-ROOT—*Asclepias tuberosa*.—Promotes sweating, the flow of urine, raising from the lungs, and relieves colic.

MAY-WEED—*Anthemis cotula*.—Stimulates, sweats, allays pain, and vomits.

BLACK COHOSH—*Macrotys racemosa*.—Relieves spasms, rheumatism, and actively promotes the menses. A decoction, or tincture of the root.

CANADA SNAKE-ROOT—*Asarum Canadense*.—The root is aromatic and stimulating; loosens the lungs and vomits. The leaves are bitter, and cause sneezing.

SPIKENARD—*Aralia racemosa*.—Healing, purifying, good for the lungs. Root and berries.

MILK WEED—*Asclepias syriaca*.—Promotes perspiration and urine. Good in gravel, dropsy, fevers and inflammations.

BARBERRY—*Barberis Vulgaris*.—A good bitter. Strengthens, and prevents putrefaction. The berries are acid, and good in fevers.

WILD INDIGO—*Baptista Tinctoria*.—Makes an excellent poultice to prevent mortification, and for ulcers. The bark of the root.

BOX-WOOD or DOG-WOOD—*Cornus Florida*.—Tonic or strengthening, a substitute for Peruvian bark. Valuable in female weakness. The bark or flowers.

GREEN-OSIER or ROSE-WILLOW—*Cornus Cericea*.—Healing and purifying; good for sore eye; stops vomiting. The bark.

SOLOMONS-SEAL—*Convallaria multiflora*.—Strengthening.—Excellent in female weakness. The root.

LADY'S-SLIPPER—*Cypripedium pubescens*.—The nerve powder. Prevents spasms, promotes natural sleep, much better than opium. The root.

CRANE'S-BILL—*Geranium maculatum*.—An active astringent. Stops bleeding from wounds, or from the lungs, or uter us.—The powder of the root applied, or the tea drank.

GOLDEN-SEAL—*Hydrastis Canadensis*.—A good bitter tonic, slightly laxative; found in the Western States. The root.

SKUNK CABBAGE—*Ictodes fetida*.—Good for coughs, asthma, spasms, and worms.

WHITE-WOOD—*Liriodendron tulipifera*.—An active tonic. Good for Hysteria. The bark.

BITTER-SWEET—*Celastrus scandens*.—The bark of the root makes a very valuable ointment for swellings.

SCULL-CAP—*Scutellaria lateriflora*.—Tonic nervine, anti-spasmodic. Formerly used to cure hydrophobia.

DRAGONS CLAW—*Petrospora andromeda*.—Promotes sweating, and the secretions generally, good in fevers—nervine, and antispasmodic—the whole plant.

CRAWLEY ROOT.—A plant with a general resemblance to the preceding, with very similar properties—and much more common. The roots with white root, cayenne and lobelia, make an excellent fever powder.

COCASH—*Aster hyssoperfolius*.—Aromatic—stimulant—and astringent. Good for rheumatism—consumption—and chronic disease generally. A tea of the roots and tops is good for bleeding at the lungs, or flooding.

MEADOW-FERN—*Myrica gale*.—Healing, and purifying. An ointment made from the burrs cures itch, salt-rheum, and tetters. The decoction may be drank.

PRICKLY ASH—*Xanthoxylon fraxineum*.—A fine diffusible stimulant, without producing much heat—sweating, quieting, and purifying. The bark or berries.

CLEAVERS—*Galium aparine*.—An active diuretic. Very good in strangury, gravel, and dropsy.

VERVAIN—*Verbena hastata*.—Tonic, and emetic. Good in ague, and fever, and coughs.

BONESET—*Eupatorium perfoliatum*.—Emetic and restorative. A valuable universal medicine. An infusion of the leaves, taken hot, sweats, and vomits; taken cold it is laxative.

BLOOD-ROOT—*Sanguinaria Canadensis*.—Emetic, expectorant, and emenagogue. Should not be given much in pregnancy. Very good for cough and croup; removes proud flesh.

BETH ROOT—*Trillium latifolium*.—A good astringent, and tonic. Useful for debility, coughs, flour albus, &c. The root.

OAK OF JERUSALEM, OR WORM-SEED—*Chenopodium anthelminticum*.—The flowers, and seeds, or the oil, destroy worms.

PARTRIDGE BERRY—*Mitchella repens*.—Highly recommended to promote parturition.

PIPSISSEWA—*Chimaphilla umbellata*.—Useful for diseases of the urinary organs, dropsy, cancers, and scrofula. The whole plant.

HIGH-CRANBERRY CRAMP-BARK—*Viburnum oreconus*.—Relaxes spasms.

INDIAN-HEMP—*Apocynum cannabinum*.—Diuretic, slightly laxative, and antispasmodic. Good in dropsy. The extract is said to cure fits, and promote the absorption of tumors. Relaxing and quieting to the system.

VIRGINIA SNAKE-ROOT—*Aristolochia serpentaria*.—Sweating and strengthening.

CELANDINE—*Chelodonium majus*.—The juice is recommended for tetters, and to promote the secretions of the liver.

GOLD-THREAD—*Coptis trifolia*.—A valuable tonic and astringent. Good to restore the appetite, remove canker. The root.

ELECAMPANE—*Inula helenium*.—Tonic and expectorant; very good in consumption. The root.

DANDELION—*Leontodon taraxacum*.—Promotes the secretions generally, particularly that of the liver. Good in dropsy, jaundice, hypochondria, and complaints of the liver. The inspissated juice.

SASSAFRAS—*Laurus sassafras*.—Stimulating and alterative. Good for rheumatic, scrofulous, and eruptive diseases. The bark of the root. The pith infused in rose water makes a fine eye water.

SPEARMINT—*Mentha viridis*.—Diffusible stimulant, diuretic and aromatic. Makes a good drink in colds, and inflammatory diseases. The oil relieves piles.

PEPPERMINT—*Mentha piperita*.—Stimulant, and aromatic. Makes a fine stimulating drink for cold. A few drops of the essence on sugar relieves pain in the stomach and bowels.

PENNYROYAL—*Hedeoma pulegoides*.—Stimulant, aromatic, and emenagogue—promoting the menses. An infusion makes a very fine drink while taking a course of medicine. All emenagogues should be avoided during pregnancy.

CATNIP—*Nepeta Cataria*.—Produces sweating, and expels wind. A valuable medicine for children.

GOLDEN-ROD—*Solidago odora*.—The tea, or essence is celebrated for headache.

GING-SHANG—*Panax quinquefolia*.—Nervine, and tonic. Good in dyspepsia, debility, and irritability of the nerves.

SMART-WEED—*Polygonum punctatum*.—Stimulates, equalizes the circulation, and prevents mortification. Makes an effectual formentation for bruises, and inflammations.

Page. Line.

57,—38, for "fourth," read "fifth".

82,—26, for "shin," read "skin."

83,—25, for "revolution," read "evolution."

84,—21, for "causing," read "curing."

104,—36, for "supposed," read "suppressed."

134,—24, for "New York," read "York."

286,—22, for "11 Chap." read "3 Chap."

There are a number of typographical errors, but the reader can correct them.

THOMSONIAN DEPOT, *

EAST BENNINGTON, VT.,

Main street, three doors West of the Methodist Church.

DR. SILAS WILCOX,

Keeps constantly for sale, wholesale and retail, an extensive assortment of pure Thomsonian Medicines, both Simple and Compound. AMONG WHICH ARE THE FOLLOWING :

Composition,	Spice Bitters,	Bread of Life,
Tonic do.	Wine do.	Catarrh Snuff,
Diaphoretic do.	Anti-Dyspeptic do	Red Raspberry,
Cough Powder,	Witch Hazle,	Stomach Pills
Nerve do.	Cough Balsam,	Cathartic or Bran-
Worm do.	Pulmonary do.	dreth's do.
Dysentery do.	Tinct. of Lobelia,	Rheumatic Linam't
Fever do.	Cleavers,	Volatile do.
Th'd Preparation,	Bl'k Cherry Bark,	Extract Dandelion,
Elder Flowers,	Scul Cap,	Black Birch,
Nerve Ointment,	Bayberry,	Balmony,
Valerian Root,	Slippery Elm,	Cayenne, African,
Pleurisy do.	Golden Seal,	Poplar,
Unicorn do.	Cough Drops,	Ginger,
Beth do.	No. 6, or Rheumat-	Myrrh,
Elecampane do.	ic do.	Oils of various k'ds.



